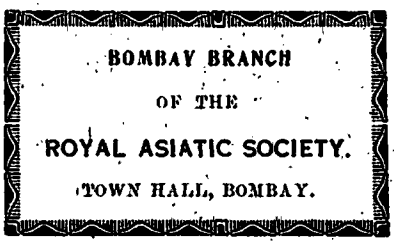
Report of the Committee of the
Bengal Chamber of Commerce
May 1882 to Dec 1883

00133022



Digitized with financial assistance from
Government of Maharashtra
on 01 February, 2020

REPORT

OF

THE COMMITTEE

OF THE

BENGAL CHAMBER OF COMMERCE.

133022

For the half-year ended 31st October 1882.

CALCUTTA:
PRINTED BY THOMAS S. SMITH, CITY PRESS
12, BENTINCK STREET.

1883.

00133022

INDEX TO THE REPORT.

Subjects:	Page.
Railway Rates	1
Insufficiency of Accommodation at Howrah for Boat Traffic ...	7
The Petroleum Bill	12
The Indian Factories Act	40
Proposed Greater Publicity to measures under consideration of the Legislature	76
The Imperial License Tax	88
Assessment under the License Act	96
The Insufficiency of Pilot Brigs at the Sandheads	99
Dues for the Basses and Minicoy Lights	115
The Doorga Pooja Holidays	129
Work at Public Offices during the Doorga Pooja Holidays	133
Duties levied in the United Kingdom on Indian Tea and Coffee	136
Registration of Notes under 50 Rupees	140
Spoiled Stamps on Bills of Exchange	147
The use of Postage Stamps for Receipts, &c.	151
Special Trains for Overland Mails	158
The Suez Canal. The position of all interests in the event of interrupted traffic	161
Proposed Abolition of the Salt Check Station at Chitpore ..	169
Landing and Delivery of Salt at Government Golahs at Suikea	172
Short Outturn of Salt Cargoes	193
Storage and Ventilation of Jute Cargoes	195
Acceptance of Bills Supra Protest	203
Act X. of 1870—for the Acquisition of Land	206
Earlier Hours for work at the Jetties	210
Importation of Dynamite	212
Importation of Colored Cotton Goods impressed with designs of Government Currency Notes	215
Government Resolution on the Port Commissioners' Administration Report for 1881-82	221
Government Resolution on the Port Officer's Report for 1881-82	241
Secretary of State's reply to the Memorial against the reduction of Salaries of Puisne Judges of the High Court ...	249
Funds of the Chamber	256

INDEX TO THE APPENDIX.

SUBJECTS:	Page.
Tonnage Schedule for the Port of Calcutta	iii
Schedule of Commission Charges	vii
Conversion of Sterling Freight into Indian Currency ...	x
Members of the Chamber	xi
Rules and Regulations of the Chamber	xii

Proceedings of the Half-yearly General Meeting of the Bengal Chamber of Commerce, held on Wednesday the 31st of January 1883.

The Hon'ble Robert Miller, *President*, in the Chair.

The advertisement convening the meeting having been read by the Secretary, the Chairman addressed the members present, as follows :—

Gentlemen,—It falls to me to move the adoption of the half-yearly report which is to-day presented to you. The report deals with a variety of subjects, many of which are of great practical interest. With some of them your Committee have been able to deal in a measure satisfactorily—that is to say, finally; but most of the others have been before this Chamber on former occasions and seem likely to continue to demand attention.

Of the more prominent of these, I may first mention the correspondence relating to the arrangement of the trading facilities of our port and town. This subject is likely before long, when the opinion or views of the Government of India as to a site for the principal goods depôt

of the East Indian Railway are made known, to become of active interest to merchants generally. Intimately connected with this is the much vexed question of the rates of freight on the East Indian Railway and their bearing upon the business of that line, and as a consequence upon the trade of Calcutta, taken in connexion with the development of railway communication between our former sole preserve, the Delhi country, and Bombay.

Within the period under review, no further railway extension in that direction has occurred, but the experience gained during 1882 and the main features of the traffic of that year are now sufficiently defined to enable us to judge better than at any time hitherto of the ultimate effect on our trade of the opening of the new route from Delhi.

There can be no doubt that for the present the admission of a competitor into the territory between Allahabad and Delhi is a cause of serious loss to us, and that it will be an embarrassment to our trade for some time to come.

It provides for consumers of English goods in the North-West Provinces—in Oudh and at Delhi—two sources of supply to choose between, and to producers there two customers for their former one; but in the long run there is reason

to hope the injury may be relative rather than actual. No amount of railway extension can wholly exclude Calcutta from the North-West of India, and the enrichment, which must inevitably follow the opening of new railways, to the countries served by them must re-act on Calcutta. It is the period of transition through which we are now passing that is uncomfortable rather than the final results.

The questions arising out of the contest between Calcutta and Bombay in their honourable rivalry for the Delhi country trade has been treated from its own point of view by the Bombay Chamber in the very interesting correspondence between that body and the Government of India, a copy of which has been furnished to your Committee through the courtesy of the Bombay Chamber, and to which we may refer so far as it concerns our interests.

The gist of the Bombay complaint is that the lines through Rajpootana do not bring to that Port its fair share of the trade of the Delhi country, and the main argument relied on is this: The Rajpootana Railway belongs to the Government. The East Indian Railway is practically State property. It is of no consequence from which side or from what portion of the entire line the

profit comes, so long as a fair interest on the gross capital is realized. The words used are—

"It seems an indisputable general rule that if two Government lines are competing for traffic from the same place, the charge per mile ought to be the same for both."

The argument I believe to be founded on a fallacy, the nature of which may appear from words taken from another part of the correspondence in question, where it is asked, "if it is a fair and equal footing to charge 25 per cent. more for carriage for 7 per cent. less distance, or in other words, to paralyse the Bombay route by an extra average charge per mile of 32 per cent."

The effect of this argument, which ignores altogether the fact that it *costs* less to carry grain from Delhi to Howrah than from Delhi to Bombay, is that the rate of freight from the Delhi country to Bombay should be adjusted with reference to the rate from Delhi to Howrah so as to throw the trade towards Bombay, which, by reason of its harbour and its lower freight to Europe, is the natural outlet for the productions of India which are consumed in Europe.

The above is the basis and the effect of the Bombay contention. It exhibits forcibly some

of the anomalies and difficulties which attend the State ownership of Railways, and if adopted and acted upon by the Government would certainly affect our interests most critically.

It may suffice, as I hope it will, for us to know that this argument has not been accepted by the Government of India as the basis on which the rates between Delhi and the rival seaports are to be regulated. The Railways are treated separately. A fair return on the separate capital involved in each is required. Due regard being given to that point, the principle which governs the rates of freight on the East Indian Railway, and we may presume also on the Rajpootana lines, is the cost of haulage and the working expenses of each. So long as this principle is maintained, and, while fully admitting the possibility of our interested position warping our views, it is difficult to know what other is tenable. I hope this Chamber may not have occasion to concern itself greatly about the matter.

From Delhi to Calcutta the East Indian Railway has an almost flat line. It possesses economical organisation and commands cheap coal. With the natural advantages of a level road and an inexhaustible supply of cheap fuel (which surely must count for something if the Rajpootana line is to

have credit for the splendid harbour of Bombay,) the East Indian Railway, and, therefore, Calcutta, can for, some time continue to command a very substantial share of the trade.

It was stated in a Bombay paper lately that a despatch has been received from the Secretary of State disapproving the Rajpootana Railway rates being manipulated in the interests of the East Indian Railway. If such is true, it is only as it should be; but if it be so, the converse also holds good that the East Indian Railway rates should not be manipulated in the interests of the Rajpootana lines.

We would base our claim to whatever share in the Delhi trade belongs to us on the principles of Free Trade and on

> "The good old rule, the simple plan
> That he shall take who has the power,
> And he shall keep who can."

To what extent Calcutta is now able to share in the trade of the North-West under existing terminal conditions at Howrah may be judged from the following statistics which have been prepared from returns furnished by the East Indian Railway.

Statement shewing the weight of Piece-Goods and Twist despatched from Bombay and Calcutta respectively.

From Bombay.	During the six months ended.			From 1st July to 25th Nov. 1882.
	30th June 1881.	31st Dec. 1881.	30th June 1882.	
To Delhi	54,231	45,994	69,901	.....
Viâ Delhi	8,528	12,920	26,453	16,592
To Agra	1,053	1,128	1,822	.....
To Cawnpore	53,197	45,262	75,424	53,406
To other Stations above Allahabad	20,593	20,024	25,849	17,020
Total maunds ...	137,602	125,382	199,449	.....
From Calcutta.				
To Delhi	89,824	86,372	82,810	65,309
To Agra	3,154	7,253	3,328	1,753
To Cawnpore	94,487	88,422	95,528	80,944
To other Stations above Allahabad not included in the above	85,476	67,594	71,655	61,815
Total maunds ...	272,941	249,641	253,321	209,821

Statement shewing the weight of Seeds despatched from Cawnpore, Agra and Delhi, respectively, to Calcutta and Bombay during the following half-years :—

During the half-year ended	From Cawnpore.		From Agra.		From Delhi.	
	To Calcutta.	To Bombay.	To Calcutta.	To Bombay.*	To Calcutta.	To Bombay.*
	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.
31st Dec. 1881.	3,18,108	57,142	8,471	7,146	1,408	548
30th June 1882.	4,14,940	23,499	19,258	9,408	1,743	...
31st Dec. 1882.	5,74,829	25,971	33,567	...	38,500	...

Statement shewing the weight of Wheat despatched from Cawnpore, Agra and Delhi, respectively, to Calcutta and Bombay, during the following half-years :—

During the half-year ended	From Cawnpore.		From Agra.		From Delhi.	
	To Calcutta.	To Bombay.*	To Calcutta.	To Bombay.*	To Calcutta.	To Bombay.*
	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.
31st Dec. 1881.	6,81,352	1,383	820	15,988	4,07,539	13,079
30th June 1882.	2,18,575	2,750	1	26	51,040	2
31st Dec. 1882.	2,44,997	..	3,776	...	1,61,459	...

* Viâ Jubbulpore.

If there is doubt as to the extent and the permanency of the share Calcutta will maintain in the trade of the North-West, there can be none as to the advantages this Port will derive from the development of Railways within Bengal itself, and in this direction the progress made in 1882 gives much cause for congratulation. At the beginning of the year some 500 miles of Provincial Railways were open and earning profit, 525 miles more were under construction, and nearly 800 miles had been surveyed. The next report of the Railways in Bengal will be looked for with great interest.

The next subject in close connection with the progress of the trade of this Port is the means at our disposal for handling the trade.

It is within your recollection that the want of space at Howrah, in spite of extensions and improvements at that station, has been grievously felt many times in 1882. The Committee now in office have refrained from further correspondence than that now laid before you on this subject, only because they believe the most was being done that, under existing circumstances, is practicable to relieve the congestion at the terminus and to facilitate business, and that, for the present, further correspondence would be useless.

But the fact remains that the export trade of the place is most heavily handicapped by the absence of convenience for handling and removing cargo from the Railway station. Just at this moment when the trade in produce which comes in by the East Indian Railway is comparatively at a standstill the inconvenience is not felt, but in April and May next and onwards we may expect, judging by past experiences, to find old complaints revive. It seems to me to be small use to call upon the East Indian Railway to protect their traffic, or on Government to develop Railways in Bengal, if we are already unable to handle the trade we possess. So far as has yet been made public, the only steps we know as actually in progress to extend our facilities in the Port are the works now going forward on the foreshore opposite the East Indian Railway Station at Howrah, by which it is believed greater space and accommodation may be given to consignees of cargo for export, and the erection of import warehouses in the jetty compound. It is not known when the former will be completed, or the exact nature of the facilities to be given. It is of importance, however, that such facilities as are given shall be without extra cost to the trade.

In former correspondence with the East Indian Railway, it was urged that it is the duty of the

Railway and in their own interest, to add the business of warehouse-men to that of carriers. To this view the Company demurred, and the contest was not pursued. Let the duty be whose it may, the fact remains that, while the Railway is able to discharge 4,000 tons of cargo daily, merchants can only take delivery of that amount at the expense of or almost total neglect of many of those small additions to the mere act of removal which constitute the difference between a safe and a reckless way of doing business, and business is limited by that fact. Let it be granted that the Railway Company is not bound, as such, to give facilities for examining, sampling, weighing, and marking; the fact remains that, if it did so, it would be asked to carry vastly more cargo than it is asked to carry now, for merchants would then be free of one of the most serious dangers to the export business. It may not be the duty of the Railway Company to provide these facilities, but it certainly seems to be their interest.

For this reason, assuming the East Indian Railway to know their interest better than we can teach it to them, and to be limited in the assistance they give the public only by the space now at their disposal, your Committee have awaited with great interest the report expected from the Committee appointed by Government to consider the ques-

tion of stations in Calcutta to be made when the new Railway bridge at Hooghly brings the East Indian Railway over to the East bank of the river. That report has not been made public, but it is sincerely to be hoped, it will lead to the whole question being dealt with by Government in a comprehensive manner.

It is difficult to see how a goods depôt at Sealdah or on the Canal, or even on the bank of the river at Chitpore, would greatly assist us. Our wants or present deficiencies are two. The practice on the part of exporters of buying produce up country, the same being packed by the seller and despatched by him for delivery at the Railway station at the Port, is gradually extending until it has become almost the rule; but these sold consignments cannot be accepted and shipped without test or examination, and the want of space for these operations limits business. What we want, in the first instance, is, therefore, elbow-room, and, secondly, a site convenient for loading on the vessels which are to take the cargo away.

It would be better for us to accept one of these facilities if we really cannot have both, but now that the entrance of the East Indian Railway into Calcutta is a sanctioned fact, it seems a pity to

deal with the advantages which it will undoubtedly give in a half-hearted manner. The decision which would seem to me, speaking from a very limited experience, likely to be most approved by shippers here would be to treat the depôt at or near Sealdah as a depôt or station only; but to carry the main line round Calcutta to Garden Reach, and then from Meteabrooz downwards to open up new moorings, and establish new warehouses for handling our export cargo. An arrangement of this sort would do justice to the possibilities at our hand in the Port itself, and provide at the same time both the required space and the required river frontage in close proximity to the ships to be loaded. It would not interfere with the business of the jetties, which would still be availed of by the liner steamers which bring in import cargoes, and take away assorted and fine cargoes, but it would be eminently convenient to the chartered vessels which carry rough and grain cargoes to Europe.

Our great want at Howrah is "room." This is what the Railway people themselves tell us in effect:—"We can, with our present regulations, deliver 4,000 tons per day at our warehouses at Howrah. If we gave you room there for sorting, sampling, and weighing, we could

not deliver 2,000 tons per day. What, then, is the good to us of reducing our rates? We should require very much more space than there is at Howrah to enable us to deal with the 4,000 tons a day if we gave you the facilities you demand. Let us come into Calcutta; make up your minds where to locate us; and give us room for doing what you say we must do." This seems to me to be practical sense, and that it is by doing all that circumstances may permit to induce the Government or other authorities to facilitate these works of improvement that this Chamber will best be fulfilling its duty with the view to enabling the Port of Calcutta to take full advantage of the extraordinary development in the means of inland transport that is in progress within the Province of Bengal.

The import warehouses in course of construction behind the jetties is a step to be warmly supported by the Chamber. When they are completed, it will be within the power of importers to distribute their consignments to every part of India within reach of the Railway system which centres on Calcutta without any expense on the score of cartage. The process, if our local system of railway were as complete as it could, without insuperable difficulty, be made, would be simply to land Manchester cargoes and transfer them

to the jetty warehouses, where they can be stored until required for distribution. When so required, they can be loaded at the warehouse door on to the railway trucks, and thence removed along the Port Commissioners' line to the depôt at Chitpore or Sealdah, where they join the united main lines of the East Indian and Eastern Bengal Railway system.

While I venture to think that a bold measure of this sort is desirable now and will be necessary in the not distant future, it seems a pity to risk delay by opposition or dispute of the decision at which the Government may arrive.

The plan I mention would, no doubt, cost a large sum, and some time would elapse before it could be of practical use; but it would be less costly and more quickly available than the Diamond Harbour scheme, for example, and it would be less experimental. When it has been perfected and found insufficient, the Diamond Harbour scheme may be undertaken; but I would again urge the attention of this Chamber to the extreme importance of doing "something," and of uniting amongst ourselves to beg of Government, in whose hands the matter practically rests, to lose no time in putting the East Indian

and Eastern Bengal Railways in a position to avail fully, by means of proper terminal facilities, of the enormous traffic that now lies dormant, cramped, and confined within the limits of Bengal and Assam.

The next point to which I would refer, as still of interest to the Chamber among the topics treated in the report now before you, is that of the proposed legislation about petroleum.

This trade has been growing enormously, and is likely, if only proper facilities are given it, to continue to expand and to effect very important results in the internal trade of this country.

Your Committee resisted, and I think rightly, a proposal to alter temporarily, but hastily and without notice, the law for the regulation of the trade which was passed two years ago, but none the less are we convinced of the importance of fostering the trade and of doing everything that may be possible to remove oppressive restrictions. The foundation of the objection to the proposed alteration of the law was that it was to be done without notice.

The alteration may or may not have been otherwise admissible, but the difficulties of the immediate case should have been met by the

formulation of rules as permitted under the Act. It was to the absence of any rules rather than to defects in the Act itself that the difficulty had arisen, and the remedy seemed to lie more properly in passing rules than in hastily, and, in contravention of the principle advocated by former Committees of consultation with all the parties interested before legislation is effected, altering in one day a law which had been made after lengthened consideration.

The merchants interested in the petroleum trade have now formulated for themselves a proposal, which your Committee hope may be accepted by the Government, having for its object the construction of a permanent convenient depôt below Garden Reach, for the landing, storing and delivery to consumers of the imported oil. If the railway is carried round Calcutta to a river-side terminus at Garden Reach, an extension to the petroleum depôt is a simple matter, and with the facilities thus provided, under rules both secure and comprehensible, there seems nothing to prevent a very much greater expansion of the trade, to the advantage of shipowners and of the railways, which are in want of inward cargo, and of poor consumers in every part in India within reach of the yearly increasing railway system.

For my own part, I do not see why tests effected in America should not be accepted in India, provided it once be proved, as probably the public would expect and the Government would require in the interests of public safety, that no chemical or other change in the nature of the oil can take place during the voyage, or, in the event of any change, what is the extent of it. There may be a well-founded objection to allowing oil to go into consumption here on the certificates of an American Inspector as such, but, speaking for myself, I do not know why the certificates of officers licensed by the Indian Government and certified to be competent by the scientific advisers of the English Board of Trade should not be accepted in India just as Consular certificates are accepted in America.

Another subject that has occupied your Committee's attention has been the expenses lying on the shipping which enters our port in the form of Pilotage dues, and, what is akin thereto, the conveniences the ships get for the money they have to pay.

For reasons which are not yet by any means clear, the number of pilot brigs available for service during 1882 has been insufficient. It needs no saying that one brig is not able to per-

form all the work required at the Sandheads yet on several occasions, for not short periods, one only was there, whereas two at sea, and two in reserve, is not an extravagant supply to meet the demand for service. In view also of the very large receipts from the pilotage dues, full particulars of which are to be found on page 7 of the Port Commissioners' Report for 1881-82, your Committee felt it very desirable to obtain, if possible, from Government, some statement to show how this large revenue was disposed of.

I am sure the Chamber will agree with me in thinking that any approach towards meddling with the Pilot Service ought to be taken with great circumspection. The port of Calcutta owes much to the service of pilots on the river, and whilst the charge is high the work done is good. If, without knowledge of all the facts, we meddle to have dues reduced, our request may be granted to our own disaster, but it is another matter to be fully informed as to how the revenue derived from the shipping is disposed of, and to be put into a position to make practical suggestions to Government for the more economical administration of the receipts.

These are the points which seemed to me gentlemen, to be deserving of special attention,

and which I have endeavoured to bring to your notice. There may be other matters which to you may seem interesting, and I shall be glad to have an expression of opinion from you on them.

In conclusion, I have to inform you that the following firms have been provisionally elected members of the Chamber, and your confirmation is now needed:—Messrs. F. C. Pallachi & Co., and Messrs. Salligram Khunnah & Co.

Mr. E. E. Bigge moved, and Mr. H. B. H. Turner seconded, that the election of the new members be confirmed.

The motion was put and carried.

Mr. L. King said he had much pleasure in seconding the adoption of the report. He agreed very strongly with several of the remarks which had fallen from the President, and particularly about the great difficulty which merchants had to contend against in loading cargo at Howrah. He thought the Committee of the Chamber could do a great deal towards removing the difficulties under which they at present laboured, and improving the present facilities for the reception and despatch of goods at Howrah. The President in his speech, had referred to several improvements and remedies which he thought might be

made for the facility of traders, and Mr. King thought that the idea of having warehouses at Garden Reach was a very good one indeed. He believed it would be a very good thing if they could also have a large warehouse built at Howrah, which would always continue to be a very important railway terminus. It may happen, and, in fact, did often happen, that a firm had 500 or 1,000 tons of goods lying at Howrah, which they were not desirous of shipping that day, and if they had a suitable warehouse at hand they could leave it there. A warehouse built on improved principles, with hydraulic lifts and other useful accessories, would, he thought, be a great boon, and would soon pay its own way. While he said this of a warehouse at Howrah, he believed that a similar construction at Garden Reach would go a great way towards doing away with the block at Howrah.

Mr. King then adverted to some conditions of the present bills-of-lading. Many people were of opinion that under the terms of the present clause in those bills ships were responsible for the marks. He believed it was found that the clause in question was not suitable. If a vessel were able to deliver goods with their marks intact, well and good ; but if not, then shippers, as

in the case of his own firm, were great losers. He thought that some steps should be taken to secure that ships should be responsible for the marks, and hoped that the attention of the Chamber would be directed to the subject.

Captain Wilkinson (P. & O. Co.,) offered a few remarks on the arrangements for the supply of pilots at the Sandheads. There appeared to be great difficulty in obtaining any information as to what becomes of the large amount collected for pilotage and light dues. It was generally believed that there was over a lakh of rupees surplus on this account; if so, there could be no excuse for allowing the brigs to drift into the state they were in last year, as such a sum would be ample to keep in an efficient state *two* more brigs than are now employed. He had been informed that a new Crig was indented for *two years* ago. Now as a 4,000-ton steamer with engines complete can be built in 12 months, two years seems a long time to build a vessel very little larger than many a river cargo boat. As far as he could learn, the brig had not yet left England, so that it will be impossible for her to be on the Pilot Station before the change of the monsoon.

There appeared to him to be gross neglect somewhere, and he considered it was the duty of

the Chamber to urge upon Government the necessity of making some better arrangement for the supply of pilots to incoming vessels during the next bad weather season. The subject was of great importance to ship-owners and Insurance Companies, and should be sifted more than it had been hitherto.

Referring to the great block at Howrah, in the delivery of grain, he thought something might be done to relieve it by laying rails on the Hooghly Bridge, and having the trucks hauled into the Jetty sheds. If necessary, the bridge might be strengthened to allow of this being done.

As regards the question of marks referred to by Mr. King, he regretted to say that the losses were entirely thrown on the ship-owners, who were heavy losers in consequence of traders not marking their goods properly.

Mr. Donald Graham, referring to the subject of railway rates as affecting the export trades of Calcutta and Bombay, said, he believed a general reduction would make plenty of traffic for both places. It should be a general reduction; for the question, as he looked at it, was not a small one of Calcutta *versus* Bombay or *vice versâ*, but India and other great wheat producing

countries, America for instance. The cost of carrying wheat to Liverpool from India is fully twice as much as carrying it from Chicago to Liverpool, and as long as that continued to be the case he did not see how India could compete in wheat with America. Much could be done, he thought, by a general reduction of railway rates. At present the freight on wheat from Delhi to Bombay or Calcutta is something like 25 per cent. of its value in the English markets.

The President had hit the proper nail on the head in connection with this question when he referred in his address to the defective traffic arrangements which at present prevailed on the East Indian Railway. The same might be said of all Indian Railways : they could all be greatly improved both in their carrying and terminal arrangements, and the matter could not be too strongly represented.

Mr. W. Petrie drew attention to the fact that a terminal charge of one rupee was charged on every 100 maunds of grain that passed over the Hooghly Bridge—a fee which, he thought, could well be knocked off.

The President, speaking, first, on the subject of pilotage arrangements, said, that while the members of the Committee of the Chamber were

all agreed that the arrangements in connection with the Pilot Service required looking into, they did not see their way towards putting forward any suggestions, or waiting in deputation on His Honour the Lieutenant-Governor, till they were possessed of more satisfactory and definite information. The *personnel* of the service, it was certain, could not be improved. The Chamber of Commerce owed a great deal to the Pilot Service and if they meddled with them on insufficient *data* it was more likely to result in harm to them than good. But if the Chamber were allowed time to ascertain facts, they would, perhaps, be able to put forward some useful suggestions. He was in a position so far as to be able to tell the meeting that of the four brigs which were supposed to constitute the pilot fleet, one did not exist at all; the third was unfit for duty; and of the two supposed to be on service one was laid up in port, and only one was actively employed. And he was also in a position to be able to tell them that for 143 days of last year only one brig was on service, and for two days there was no brig at all at the Station. There was a statement of the revenue derived from the Pilot Service, but there seemed to be none as to how the money was spent. A report in this connection had, however, been prepared by the Port

Officer, and would soon be placed at the disposal of the Chamber. It would be unwise, therefore, for the Committee to go up to the Lieutenant-Governor without being in possession of some tangible facts to support their position.

In the next place, he thought they should all combine to have better terminal accommodation for their goods. That would also bear on the question of marks; for it was the want of accommodation which led to improper tallying, and gave rise to the difficulty spoken of by Mr. King. With regard to the fee of one rupee charged on every 100 maunds of goods which passed over the Hooghly Bridge, he thought till the construction charges were fully paid for the toll was inevitable. The bridge, there could be no doubt, would have to be paid for, and so soon as it was, the charge would probably be done away with. The bridge, it was undeniable, had been most useful to trade in Calcutta, and naturally traders had been selected as parties who should pay their quota towards it.

As regards the honourable rivalry between Calcutta and Bombay in the trade with the Upper Provinces it was likely to result in great advantage to Delhi, and if to Delhi, then to Calcutta also as a principal customer of Delhi. In his

opnion, they should by all means renew their contest with the East Indian Railway for a reduction of the rates; they should continue to urge this point on the attention of the Government till they obtained proper terms: and if even then they they could not get the Railway Company to reduce their rates, why, then, the Chamber should simply endeavour to make them see that it was their interest to do so.

The motion that the report be adopted was put and carried.

Mr. H. B. H. Turner then proposed a vote of thanks to the President and the Committee for their services during the past half-year.

Mr. E. E. Bigge seconded the motion, which was carried.

A vote of thanks to the Chair closed the proceedings.

H. W. I. WOOD,

Secretary.

BENGAL CHAMBER OF COMMERCE.

Report of the Committee of the half-year ended 31st October 1882.

THE Committee submit their Report on the principal subjects which have had their attention during the past half-year.

RAILWAY RATES.

The Committee have felt that, the interests of the East Indian Railway and of the Port of Calcutta being identical, the question of the scale of freight chargeable by the Company should be left in the hands of the responsible executive who best understand it. The Railway at present carries as much as it can discharge, and as much as the present appliances and space in the Port are equal to removing, and a reduction in downward rates might under existing circumstances lead only to a loss of profit to the Railway. When the new station is fixed upon and storage accommodation increased, it may then be advisable to return to the subject of rates.

From Government of India to Government of Bombay.

No. 472 *R.T.—Simla, May* 19*th,* 1882.

I am directed to acknowledge the receipt of your letters Nos. 374 and 846, dated 24th February and 25th April 1882 respectively, forwarding copies of correspondence on the subject of through rates from Northern India to Bombay *vid* Rajputana.

2. It would appear that the Bombay Chamber of Commerce contend that, in fairness to the mercantile community of Bombay, the through rates from Delhi and Agra *vid* Rajputana should not be in excess of the rates from these stations to Calcutta. The question of the division of the special through rates to Bombay between the two Railways concerned is also connected with this case.

3. In reply, I am directed to state that, after a careful consideration of all the arguments adduced on this somewhat complicated question, His Excellency the Governor-General in Council has come to the conclusion that, in fixing the charges for the carriage of the same commodity on different Railways, the cost of carriage cannot be neglected, nor can this important element be omitted in arranging the division of through rates between lines working in connection.

4. The principal items which cause the cost of carriage to vary on different lines are the cost of fuel and the gradients worked over. The cost of coal per ton on the three lines concerned was as follows during the first-half of 1881 :—

	Rs.
East Indian Railway	4·47

	Rs.
Bombay, Baroda and Central India Railway	17·6
Rajputana Railway	23·88

and the cost of coal consumed per 1,000 ton-miles was—

	Rs.
On the East Indian Railway	·305
„ Bombay, Baroda and Central India Railway	1·116
„ Rajputana-Malwa Railway ...	2·336

5. As to gradients, the Bombay, Baroda and Central India Railway has the advantage of passing through a very level country, and the East Indian Railway has for the greater part of its length a similar advantage; while the Rajputana line runs through a hilly country, and is consequently heavily weighted with the cost of haulage up steep gradients, which not only enchance the consumption of fuel, but every item of expenditure directly due to the running of trains.

6. From the above facts it appears perfectly clear that the Rajputana line cannot afford to carry at as low a mileage rate as the East Indian Railway; and to keep up the charges on the latter line to an equality with those on the former would be manifestly unjust to the country served by the East Indian. The rates on both lines should be fixed at the lowest limit possible to secure a fair profit on working. This principle must also be considered in dividing through rates over connected lines. To regulate these charges on the basis of an equal mileage division would in the case in question practically overweight them in order to secure a larger proportion of

profit for one line than for the other. An equal mileage division is not compatible with the lowest paying charge.

7. As the Government has relegated to Guaranteed Companies the power to vary rates within certain maxima, it only remains to fix the lowest rate which the Rajputana-Malwa Railway can for the present be permitted to charge for the carriage of country produce, such as is comprised under the special class A, leaving the Manager to arrange with the Agent, Bombay, Baroda and Central India Railway, the total charge for through traffic.

8. The Government of India, however, understands from the Manager, Rajputana-Malwa Railway, that the Agent, Bombay, Baroda and Central India, whilst agreeing to a through rate of 5 annas 5 pies per maund over his line for traffic of this class booked from Agra or Delhi, will not agree to the same rate for similar goods booked to Bombay from any other stations on the Rajputana-Malwa Railway; but insists on a rate of 7 annas per maund as the share of the Bombay, Baroda and Central India Railway for such goods, thus making his reduced rate simply a competitive rate for the East Indian Railway traffic; and I am to observe, with reference to this point, that if 5 annas 5 pies is a paying rate for the Bombay, Baroda and Central India Railway for goods coming from Agra or Delhi, it must be equally remunerative to that Company for similar goods coming from Ajmere, Nasirabad, or indeed any station on the Rajputana-Malwa Railway above Sabarmati; and, therefore, that if the Agent was in earnest in lowering his rates for the benefit of the trade of Bombay, he would be prepared to accept the lower rate for this class of traffic when put into the Bombay, Baroda

and Central India wagons at Sabarmati without reference to where it comes from. The Government of India has now under consideration proposals from the Manager, Rajputana-Malwa Railway, for an alteration in the minimum rate at present sanctioned, which is 10 annas per maund from Delhi to Sabarmati, or about $\frac{1}{5}$th pie per maund per mile; but as it cannot permit differential competitive rates with reference to special stations served by other Railways, I am to say that orders on the Manager's proposals will be deferred, pending an assurance from the Government of Bombay that the Agent, Bombay, Baroda and Central India Railway, is prepared to grant the same rate over that Railway to this traffic from whatever station of the Rajputana-Malwa Railway the goods may be booked.

9. Referring to paragraph 4 of your letter No. 374 of the 24th February, I am to observe that the adoption of the metre gauge for the Rajputana Railway is justified by its smaller capital cost, and by the fact that the Government could not, looking to the general requirements of the whole country, have allotted sufficient funds to this Railway to enable it to have been carried out as a broad gauge line. The question has, indeed, really been between a metre gauge railway or none at all, and not between a broad or a metre gauge railway.

10. In regard to the allegations of the Bombay Chamber of Commerce that the action of the Government has hampered the trade of Bombay, it is only necessary to observe that the complaint has been clearly made without due consideration. Less than 50,000 tons of wheat have been carried from Delhi and Agra, or past

the Gaziabad junction, during the year 1881, and of this about half has gone to Bombay and half to Calcutta; while the total export of this staple from Bombay has apparently increased during 1881 to thirty-six times what it was in 1879, while the export from Calcutta has about trebled in the same period.

11. The Government of India has certainly no wish to favor either the port of Calcutta or that of Bombay in this matter; both ports have their respective advantages and disadvantages as regards the export of country produce. Bombay has a magnificent harbour and a convenient dock, combined with lower freight charges to Europe; but as regards inland transport it has the disadvantage of costly fuel and hilly country. Calcutta, on the other hand, has a somewhat dangerous river for its approach, no docks, and heavier freight charges to Europe; but in respect of inland transport it has great advantages, not only from the abundant supply of cheap coal, but also from its river transport. The competition of the river compels low charges on the railways, while the cheap coal enables these low charges to be remunerative; and it appears to His Excellency the Governor-General in Council that if the Government ruled that the rates from Delhi and Agra to Bombay and Calcutta were to be the same, such ruling would be distinctly favoring Bombay at the expense of Calcutta, and placing an artificial restriction on the East Indian Railway traffic, thereby depriving the districts served by it of the natural advantages of their position.

I have the honor to be,

Sir,

Your most obedient Servant,

W. S. TREVOR, *Colonel, R.E.,*

Secretary.

No 504 R. T.

Forwarded to the Government of Bengal, Public Works Department, for information, with reference to that Government's letter No. 325 R., dated 21st January 1882.

By order,

(Sd.) FRED. FIREBRACE, *Major, R. E.*,
Under-Secretary.

Govt. of India, P. W. Dept.
Railway Traffic.
Simla, 29th May 1882.

INSUFFICIENCY OF ACCOMMODATION AT HOWRAH FOR BOAT TRAFFIC.

The insufficiency of the accommodation to export and load cargo boats at the Railway pontoon at Howrah is becoming a very serious matter, especially during the busy season; and it is to be regretted that valuable time should have been lost in the discussion whether the Port Commissioners or the Railway Company were to undertake the work required.

The Committee trust that having in view the great increase in the traffic of produce through the East Indian Railway, and the impetus which is daily given to direct shipments from Howrah, the Board of Directors will take energetic steps to meet the requirements of the trade by supplying shippers with proper accommodation for exporting goods from their jetties.

From Chamber to East Indian Railway.

Calcutta, 26th July 1882.

I am desired by the Committee of the Chamber of Commerce to address you on the subject of the present state of the accommodation at the Railway pontoons at Howrah. The block of boats opposite the pontoons has now become so serious that the business of a great majority of the smaller shippers of the port is almost suspended owing to their being unable to obtain delivery of their cargo into their boats.

The following is an extract from a letter addressed, yesterday to the Committee by a Member of the Chamber, and it serves to illustrate, but only very partially as the Committee from their individual experience believe, the present condition of things on the river front at Howrah.

"Leaving aside for the moment the want of space at the station generally, I wish now more particularly to refer to the adjoining jetties, which are quite out of proportion to the traffic that is going on. I think that something should be immediately done to meet the wants of shippers, and give them more elbow room for loading their produce, and that any extension of those jetties, even of a temporary nature, would be a step in the right direction. The jetty room is so small, and the number of boats waiting to be loaded so large, that there is a continual block going on, and it is often a question of many hours before a cargo boat can approach near enough to load. The result is delay, confusion, and, with loss of time, loss of money.

"As an instance, I might mention that last Saturday morning we had at Howrah four boats to load 100 tons of wheat. The obstruction was so great that our boats could not begin working before Monday afternoon, and then they had to load one by one."

The Committee feel it to be unnecessary to enlarge to you on the injury to the interest of the East Indian Railway which arises from the want of delivery space at your command. One effect of it, however, is, that unless individual shippers are in the way of doing so extensive a business as to make it possible, on the score of expense, to maintain a separate special establishment for the sole purpose of taking delivery of their cargo at Howrah and of placing it in boats at the pontoon, they are practically debarred from the trade altogether, a result which is in no respect desirable.

The Committee are unable to suggest to you a remedy for the present congestion at Howrah: they must for the present be content with recording their opinion that in the interests of all members of Calcutta trade it is greatly to be deplored, and that it calls for immediate attention at the hands of Government.

From East Indian Railway to Chamber.

No. 9726—*Calcutta, 7th August* 1882.

I beg to acknowledge your letter dated 26th ultimo, complaining that the block of boats opposite to the Howrah pontoon has now become so serious, that the business of a great majority of the smaller shippers of the port is almost suspended owing to their being unable to obtain delivery of cargo into their boats.

The Chamber further state that they are unable to suggest a remedy for the "congestion" at Howrah.

In reply to the Chamber's representation, I beg to remark that the inadequacy of the accommodation at Howrah for boated traffic, such as we have recently had, was foreseen some months ago, and for the purpose of affording greater facilities in this respect for the present season's traffic, the Company's Board of Directors were requested by telegram in January last to sanction a boat dock and retaining wall at Howrah.

The Board authorized the work by telegram, and in order that it might be put in hand before the season was too far advanced, and that the additional accommodation might become to some extent available for the present traffic, the sanction of the Government authorities was solicited to the scheme.

Thereupon the Port Commissioners objected to the execution by the Railway Company of work of the kind proposed which they contended should be undertaken by themselves.

Valuable time was lost in the discussion whether the Port Commissioners or this Company should do the work, and when His Honor the Lieutenant-Governor decided that this Company should provide the accommodation, it was then too late to give the present season's traffic any of the benefit to be derived from it.

From Chamber to Port Commissioners.

Calcutta, 26th July 1882.

By the desire of the Committee of the Chamber of Commerce, I beg to hand you copy of a letter of this date addressed to the Agent of the East Indian Railway with reference to the block of traffic on the river front opposite the Howrah station.

The extract from a letter from a Member of the Chamber mentioned in the Committee's letter to Mr. Leslie, gives a very faint idea of the difficulty of obtaining delivery into boats from the Railway pontoons.

It is needless to point out to you the serious effects on the trade of this port that follow from the difficulty of obtaining prompt shipment from Howrah.

The export trade in wheat and seeds is now practically thrown into the hands of a few shippers, who by reason of the extent of their business are able to maintain a separate establishment solely occupied at the Howrah station. The trade of the port is seriously curtailed by the very limited resources at the command of the East Indian Railway in regard to giving delivery.

The Committee are unable to suggest either to you or to the Agent of the East Indian Railway any remedy for an evil, the existence of which is no doubt even more plainly evident to the management of the Railway than to this Committee. I am to say, however, that if a remedy could be indicated either by the Port Commissioners or by the Agent of the East Indian Railway, this Committee

would ea... co-operate in pressing it on the attention of the Government.

THE PETROLEUM BILL.

The ground taken up by the Committee in opposing hasty legislation has been endorsed by all those interested in this question; and the efforts of the Committee have principally been directed to the promulgation of intelligible rules for the administration of the Act as it now stands.

From Chamber to Government of India.

Calcutta, 3rd June 1882.

UNDER instructions from the Committee of the Chamber of Commrece, I had the honor to address to you the following telegram, dated the 31st ultimo.

"*Englishman* newspaper of to-day states a Bill is to be introduced and passed to-day amending Petroleum Act upon suggestion of Secretary of State. If such is the intention of Government, the Committee of the Chamber would respectfully urge that the commercial community of Calcutta should first be allowed an expression of opinion before the Act is altered, because large interests are affected."

The immediate cause of sending that message was an article in the *Englishman* newspaper of the same date,

and which, no doubt, has since come under your observation.

The Committee of the Chamber have delayed further correspondence upon the subject, in expectation of receiving from the Government of India some authoritative communication of what alterations in the Act, regulating the import of Petroleum, were contemplated.

The Committee would still have adhered to the original intention of awaiting such a communication from Government before taking any further steps in this matter, had it not been for certain communications addressed to them by members of the Chamber, with copies of correspondence, relative to the importation of a large quantity of oil which is now in course of landing, but regarding the quality of which divergent opinions are expressed; whether the same comes under the denomination of dangerous Petroleum, or can be passed as the ordinary article of commerce, which under the Petroleum Act can be dealt in without the more stringent conditions attached to dealing in the first-named quality.

The Committee do not feel justified in expressing any opinion on the merits of the pending dispute. Their attention is confined solely to the fact, that an amendment radically affecting the existing Act is to be passed by the Viceroy in Council without the mercantile community, who are largely and primarily concerned, having had an opportunity of considering the terms and effects of the intended amendment.

The Committee would point out that the trade in Petroleum has largely developed under the existing law,

and large interests are now involved, and that the trade has settled itself into certain custom and method, so that any sudden change in the law under which the trade has been hitherto carried on may, and it is alleged will, cause most serious inconvenience and loss to many of those concerned in it.

The opinion of the mercantile community has previously been sought by Government and acted on in connection with the Petroleum Act, as may be proved by reference to the proceedings of the Legislative Council of the 4th February 1881.

It would appear to the Committee that the necessity for due notice being given to the trade, and to the public at large, which existed when the present Act was passed, are now greatly intensified, owing to the fact already noticed that under the Act the trade has become large and important; and if due notice were thought necessary when the Act was passed, at least no less notice should be given in respect of any amendments.

The article in the *Englishman* alluded to also states that the contemplated alteration or amendment of the Act is to be carried out immediately, under special orders from the Secretary of State communicated by telegram to His Excellency the Viceroy. Hitherto the Chamber of Commerce have had the assurance—if not definitely expressed, at all events implied—that the Secretary of State would like to see the commercial community consulted in any question affecting large commercial interests; and it is upon these grounds that the Committee of the Chamber urge their respectful request

to be made acquainted with the intentions of the Supreme Government in order to give warning to their fellow merchants of any material change in the Act or in the working of it.

From Government of India to Chamber.

No. 652, *Simla*, 1*st June* 1882.

With reference to your telegram of yesterday's date, I am directed to enclose a copy of the Petroleum Bill introduced in the Legislative Council yesterday, together with copy of the Objects and Reasons of the same; and to inform you that it is proposed to pass the Bill next Wednesday (7th instant), as the relief it is intended to afford to dealers in Petroleum is represented to be urgently called for.

STATEMENT OF OBJECTS AND REASONS.

COMMUNICATIONS received by the Government of India by telegraph within the last two or three weeks afford ground for apprehending that petroleum which, when tested in America and elsewhere in the manner prescribed by the Petroleum Act, 1881, flashes at a point above 73° Fahrenheit may, when tested in the same manner on its arrival here, flash at a point below 73° Fahrenheit, and consequently have to be placed under the restrictions to which dangerous petroleum is subject. It has been suggested that this is probably due not to any want of care on the part of those applying the test in either country, but to the difference of climate. Steps have been taken with a view to having the matter fully

inquired into; but as this will take some time, and as it is but fair that importers should in the meanwhile be relieved from the hardship to which they are exposed, it is proposed for the present to exclude from the class of dangerous petroleum all petroleum covered by a certificate granted at the place of export and of such a description that, in the opinion of the Governor-General, it may be accepted as proving that the petroleum it refers to, if tested at the place of export according to our method, would be found to have a flashing point above 73° Fahrenheit.

C. P. ILBERT.

The 31st May 1882.

A

BILL

To modify temporarily certain provisions of the Petroleum Act, 1881.

Preamble.

WHEREAS there is reason to doubt whether the mode of testing petroleum prescribed by the Petroleum Act, 1881, is in all cases to be relied on in India, and it is therefore expedient, pending the removal of that doubt, or the adoption of an improved mode of testing petroleum, to afford, in respect of petroleum imported under certain guarantees as to its quality, some relief from the difficulties under which, owing to the said doubt, persons dealing in such petroleum might otherwise labour; it is hereby enacted as follows:—

Short title.

1. This Act may be called the Petroleum Act, 1882.

It shall come into force at once, and shall continue in force only until the first day of January 1883, or such later date as the Governor-General in Council may, from time to time, by notification in the *Gazette of India*, fix in this behalf, and as long as it continues in force, shall be read with and taken as part of the Petroleum Act, 1881.

Commencement. Duration.

This Act to be read with Act VIII of 1881.

2. Whenever it appears to the Governor-General in Council that certificates of any description are commonly granted in any place beyond the limits of British India in respect of petroleum exported from that place to British India, and that a certificate of that description is sufficient to prove that the petroleum therein referred to would, if tested in the manner prescribed by the Petroleum Act, 1881, at the place from which it is exported, have a flashing point not below seventy-three degrees of Fahrenheit's thermometer, the Governor-General in Council may direct that petroleum imported from that place and covered by a certificate of that description shall not be deemed to be dangerous petroleum.

Certain petroleum not to be deemed "dangerous petroleum."

While any such direction continues in force, petroleum to which it applies shall not be deemed to be dangerous petroleum.

From Government of India to Chamber.

Telegram, 7th June 1882.

Petroleum bill not passed to-day; any representation of your views submitted promptly will be fully considered.

From Chamber to the Government of India.

Calcutta, 6th June 1882.

In continuation of my letter of the 3rd instant, I have the honor to acknowledge the receipt of your letter No. 652 of the 1st instant, forwarding copies of the Petroleum Bill with copies of Statement of the Objects and Reasons for the bill which it is proposed to pass tomorrow, on the ground that the relief it is intended to afford to dealers in petroleum is represented to be urgently called for.

At a Special Meeting of the Committee of the Chamber held yesterday, the subject of your letter was fully discussed; and after giving attentive consideration to the circumstances under which it is proposed to introduce the bill to modify temporarily certain provisions of the Petroleum Act 8 of 1881, the Committee came to the conclusion that, in their judgment, the reasons given for that important measure did not justify the hasty legislation which it is proposed to adopt.

It was therefore resolved to send you a telegram, of which I here give a copy.

"*Your letter and Petroleum Bill received. Committee of Chamber are of opinion that the Statement of Objects and Reasons does not justify hasty legislation. Nearly six months previous notice was conceded for existing Act and the Committee upon same grounds now think that reasonable notice should be given for amendment. Will write fully by post.*"

The Committee cannot refrain from expressing their regret that in a matter of such moment and urgency, which had been for some days before the Government of India, they had no direct intimation of the purpose of Government, and that they had no knowledge of it except that obtained from the columns of a local newspaper, which the Committee took as their authority in telegraphing to you on the 31st of last month.

The Committee respectfully submit that the provisions of the bill appear to be such as to render practically useless and to supersede the Act of last year, which was not passed until after the most careful and deliberate consideration and discussion, and under which ample time was allowed for the trade to make their arrangements in accordance with the requirements of the law; the Honorable mover of the bill concluding his remarks in Council on the 4th February 1881, with these words:—" To guard against the possibility of hardship to holders or consignees of dangerous Petroleum the bill had been amended, so that it would not come into force till 1st July 1881,"—or nearly 5 months from the date on which the Bill was passed.

If it was at that time held to be just that ample notice should be given to those interested in the Petroleum trade, it appears to the Committee of the Chamber no less just to afford equally ample notice now before any partial alteration of the Act comes into force.

The most essential part of the Act was the authoritative test required to determine the quality of Petroleum, and the recommendation of the Select Committee who

had fixed the flashing point of dangerous petroleum at 73 degrees F. by Abel's test, equal to 100 degrees F. by the old test, was adopted as the lowest point which could safely be taken.

It is now proposed to abandon that resolution, and to exclude from the class of dangerous petroleum all petroleum covered by a certificate granted at the place of export, and of such a description that, in the opinion of His Excellency the Governor-General, it may be accepted as proving that the petroleum it refers to, if tested at the place of export according to the Indian method, would be found to have a flashing point above 73 degrees Fahrenheit.

The Committee submit that this amendment completely changes the fundamental character of the Act by removing the operation of testing from the place of destination and consumption to the place of production and shipment, and the resulting condition necessarily will be not what the quality of petroleum actually is on arrival in India, but what it was when it left America. The primary object of last year's legislation—*viz.*, the prevention of consequences that might result from the importation and storage of dangerous petroleum—is obviously defeated if the safeguard afforded by tests made in India is removed; and the admission of certificates of quality issued in America, however carefully granted, in lieu of the tests required by the Act, may be attended with results which the provisions of the Act are intended to obviate.

As already stated in their first letter, the Committee do not venture to express any opinion on the merits

of the circumstances which have led the Government to take up the position defined in the Statement of Objects and Reasons for the Bill: they simply submit that the change involved in the proposed measure is one which demands further inquiry and consideration, and that it should not have effect until the petroleum traders have been sufficiently advised of the important alteration.

Under the law the trade has been carried on in a largely increasing volume until the present time. The proposed amendment in the opinion of the Committee is an unsettling amendment, which, if carried into law, would introduce a new element of risk in the trade, and so far alter its conditions.

From Government of Bengal to Chamber.

No. 399, *Calcutta, the 5th June* 1882.

I am directed to invite your attention to your letter dated the 4th September 1880, in which the views of the Chamber of Commerce were expressed regarding the Bill which was subsequently passed as Act VIII of 1881, (The Petroleum Act), and to request that the Lieutenant-Governor may be favored with the opinion of the Chamber as to the standard which should be maintained for dangerous petroleum.

The Lieutenant-Governor desires to communicate the opinion of the Chamber to the Government of India *to-morrow*, and I am therefore to ask that a reply may be sent to this letter as early in the day as possible.

From Chamber to Government of Bengal.

Calcutta, 7th June 1882.

I have submitted to the Committee of the Chamber of Commerce your reference No. 399 of the 5th instant, relative to the standard which should be maintained for dangerous petroleum.

In reply, I am directed to state that since the Chamber has no other evidence than that furnished by the Special Committee appointed to report on the subject in 1879, and as there is nothing to show that the standard of quality can be safely reduced, the Committee are of opinion that the flashing point of dangerous petroleum fixed by the Select Committee of the Legislative Council of the Governor-General at 73 degrees Fahrenheit by Abel's test, equal to 100 degrees Fahrenheit by the old test, should be adhered to.

From Chamber to Government of Bengal.

Calcutta, June 29th 1882.

I am instructed by the Committee of the Chamber of Commerce to place you in possession of the representations which they deemed it necessary to make to the Government of India relative to the proposed amendment of the Petroleum Act. Their letters of the 3rd and 6th instant contain all that has passed between the Government of India and the Chamber, until the Committee were advised of the orders issued by His Honor the Lieutenant-Governor for the re-ship-

ment of a considerable quantity of petroleum which had been landed, but not allowed to pass into consumption, unless it satisfied the tests established by Act 8 of 1881.

On receipt of this announcement, the Committee of the Chamber transmitted the following message to the Government of India—"*Committee beg Government to suspend order to re-ship petroleum until fresh tests have been made. This step is highly desirable in public interests with the view to ascertain whether oil improves or deteriorates after landing. Moreover, it is currently reported that former tests were irregular. The Committee consider further tests both desirable in public interests, and just to importers concerned. Re-shipment within 72 hours impossible.*"

In reply, the Committee received the following message by telegraph, dated the 23rd instant:—

"*Bengal Government requested to arrange for further tests if consignees can indicate differences in cargo, or if sufficient number for fair average not yet made. Views of Chamber on this point, if represented to Bengal would doubtless receive attention. Bengal also requested postpone re-shipment, pending consideration of possibility of raising standard by exposure.*

Availing themselves of the permission to represent their views on the point indicated in their reply, the Committee desire to submit the following remarks for the consideration of His Honor.

The Committee have employed the interval in making careful inquiry from those who are engaged and inter-

ested in the Petroleum trade, and they submit, in original, the answers to a series of questions which, they thought, sufficiently embraced the points upon which information was considered desirable.

There seems to be a consensus of opinion that the standard of 73° fixed by the Act of 1881 is a proper standard, and that no alteration is called for.

There is considerable difference of opinion amongst importers and others as to whether an average test should be permitted, and as to the amount of discretion to be given to Government officials in regard to the admission of oil testing slightly under standard.

After consideration of all the replies received, the Committee concur in thinking that there is no necessity for fresh legislation on the subject. The present Act provides that rules may be passed by the Local Government for the administration of the Act, and it seems to the Committee that this may sufficiently meet the requirements of the case. So far it does not appear that any rules have been passed in Calcutta under the Act, and the Committee fear that it is in a great measure to this omission that the present deadlock is due.

The Committee are of opinion that an average test may be permitted, provided it be incumbent on the Official Examiner to test not fewer than some specified percentage of the whole cargo, say, 1 case out of every 5,000 cases landed. As a precaution against an undue proportion of oil below standard being landed,

It might be ruled that in the event of, say, 5 cases out of those tested proving to be below standard, a more frequent test, say of 1 case in every 1,000 cases, be imposed; and that in the event of five per cent. of the oil so tested being found below standard, the cargo to be deemed dangerous and detained for further examination, the result to be left to the discretion of the Government. As general publicity would necessarily attach to these proceedings, the Committee consider the safeguard to the public and to the trade practically secured. The point which the Committee wish to make is that, the number of the cases which the Official Examiner must examine shall be specified by rule, in order that importers may know what amount of examination they are to be subjected to, and that all may be treated alike.

It would further appear from enquiries made that there is a want of uniformity between the method used in testing here and in Bombay. This is to be regretted. It is desirable that not merely the same test but the same way of applying the test should be used everywhere under the Act. It has been proved to demonstration that the test made first, after the opening of a case, shows a lower standard than the subsequent tests; and as an example, the case of the Devoe's oil ex "Antoinette" may be quoted. It appears to the Committee that a rule might be made by the Local Government to provide that the test should be applied, 1*st*, as instantaneously as may be possible after the opening of the case, or, 2*nd*, after an interval

of say, 5 minutes, or 10 minutes, as may be decided. Whatever the interval be, let it be an uniform interval and fixed, and not left to the discretion of the testing officers.

With regard to the oil now landed and stopped the Committee think that rules on the general lines indicated above might, under the existing Act, be passed forthwith by the Government of Bengal, and that no further delay should take place.

From Chamber to the Government of Bengal.

Calcutta, 16th October 1882.

The Committee of the Chamber of Commerce have been furnished with copy of a memorial recently addressed to the Hon'ble the Lieutenant-Governor by sundry merchants, agents and dealers, interested in the petroleum trade, and they have carefully considered the various points submitted for His Honor's attention.

With the general tenor of the memorial the Committee cordially agree; and the matter is of so great importance, in all respects, that they do not hesitate to accord to it the support which the Chamber is bound to give to all well considered measures for the protection and promotion of any branch of the commerce of Calcutta.

Although the petroleum trade is an industry of comparatively recent introduction into this port, yet it has assumed very large proportions during the last few years, and its expansion can only be arrested by a failure of the supply. Consequently, any preventable limitation of a trade which endeavours to freely meet the wants of all

sections of the community, is an injustice not only to those who carry it on, but also to the large masses of the people who constitute their chief customers.

To the poorer classes, therefore, who may be regarded as the far largest proportion of consumers, an abundant supply of cheap oil is an economic necessity of great importance and interest in their household requirements; and it cannot but be admitted that it is the obvious duty of the State to give all legitimate aid to a trade upon which those classes are entirely dependent.

The memorialists have pressed upon the Lieutenant-Governor's consideration various ways in which that aid can be given, and the measures by which the trade can be fostered; and the Committee of the Chamber are of opinion that the memorialists have submitted a case, the urgency of which demands that it should be dealt with by the Government promptly, and on a scale commensurate with the necessities of the trade.

The authoritative limitation of the test of quality of petroleum, with the view of ascertaining the character of the oil, its freedom from danger to public safety, and the means adopted for ascertaining that quality and character, are questions which the Committee of the Chamber are not prepared to discuss, as these are subjects with which scientific experts alone can properly deal; but they venture to express their opinion that the standard test of 73 degrees Fahrenheit, which is commonly adopted in Europe and America, and hitherto in this country, is sufficiently high for all practical purposes; and that the contention of the memorialists, that a higher

standard would prejudicially affect the trade by increasing the cost of oil, and thereby restricting its importation and consumption, rests on reasonable grounds.

The representations of the memoralists on the subject of accommodation for the trade and the locality best suited for it are points worthy of special consideration. The Committee are of opinion that the reasons assigned for maintaining Meteabrooz as the most convenient for all interests concerned place the question of locality, in all its bearings on the trade and public convenience and safety, beyond any conceivable objection to the permanent establishment of the pretroleum depôt at the place it now occupies. The site is capable of being converted into spacious and commodious premises for the trade the river frontage presents all that can be desired for the safe and convenient discharge of vessels; and with the measures suggested by the memorialists for the delivery of cargoes, their conveyance to, and storage in, suitably constructed godowns, and other points in connection with the business, there will be ample and adequate provision for the proper carrying on of a trade which so closely affects the comfort and convenience of the public at large.

The Committee of the Chamber trust that the apprehensions of the memorialists that the Government has ever contemplated the establishment of a depôt at Diamond Harbour are unfounded. To quote the words of a representative of numerous corporations and firms exporting petroleum from the United States, in a recent letter to the Chamber—"it seems to me that, aside from any

other question, the distance presents insuperable objections, complicating every detail of receiving and distributing, and imposing a transportation tax, increasing both cost and handling, without benefit to any one but the carrier. Any policy that lessens the handling of petroleum and brings its discharge and distribution under the easy supervision of the parties interested is greatly to be desired."

The Committee of the Chamber concur in the soundness of these remarks, which quite confirm their view as to the absolute necessity for abandoning all idea of Diamond Harbour as a temporary or parmanent depôt.

Meteabrooz is beyond question the proper locality; and with the view of conducting the petroleum traffic with the Upper Provinces by means of the East Indian Railway when its junction at Sealdah is completed, and with the Eastern districts of Bengal by means of the Eastern Bengal and other lines of Railway, the depôt might advantageously be connected with Sealdah, by a line viâ Entally, Ballygunge and Alipore, which would at certain hours run regular oil trains, and at other times run passenger trains, and thus afford a valuable and profitable link of communication between the southern suburbs and the centre of Calcutta. Industrial works springing up in all directions necessarily drive the laboring population to greater distances from the town, and this line would give the working classes the means of carrying them quickly and cheaply to those places where remunerative employment is to be found. It would also afford those engaged in the petroleum trade ready access to the depôt, and at the same time be the means of keeping

the streets of Calcutta free from much cumbersome traffic.

From Government of Bengal to Chamber.

No. 1303 $\frac{T}{M}$. *Darjeeling the* 30*th October* 1882.

I am directed to acknowledge the receipt of your letter dated the 16th instant, in which the attention of Government is invited to the memorial recently submitted by certain merchants, agents, and dealers interested in the Petroleum trade in Calcutta, containing suggestions for the protection and encouragement of the trade. The Committee of the Chamber fully conceur in the proposals made by the memorialists, and recommend them for the consideration of Government.

In reply, I am directed to state, for the information of the Committee of the Chamber of Commerce, that the suggestion made by the memorialists that screw pile jetties and godowns should be erected at Meteabrooz for the landing and storage of petroleum cargoes is already under consideration in the General Marine and Public Works Department of this Government. The Board of Revenue have also been asked to ascertain whether the land referred to by the memorialists, as that on which godowns should be erected, could be acquired on reasonable terms. The representations made by the Chamber and by the memorialists will receive full consideration before the matter is finally decided by Government.

From Messrs. Kettlewell, Bullen & Co. to Chamber.

Calcutta, 21st June 1882.

We request you to lay the enclosed order of Government herewith before the Committee, as a special matter, as quickly as possible.

You will observe the Government of India intend to maintain the provisions of Act VIII. of 1881 in their entirety, and give us notice to re-ship and remove from the Port the cargo of kerosine oil ex *Viscount*, now stored at the Meteabrooz Ghâut, within 72 hours.

Apart from the question of sampling and testing Petroleum here under the said Act, a question, which we understood was under consideration the Government of India order us to perform what is practically impossible, and under the circumstances we would ask the assistance of your Committee to prevent the great hardship and heavy loss which the enforcement of this order, even within a reasonable time, must necessarily entail. It is not, we think, too much to request the Government of India to withdraw this order until further tests of the cargo have been made, as we think it very likely that the cargo of kerosine oil has appreciated in quality since it was landed. The request, we suggest to the Committee, is not unreasonable, and in common fairness, we think, it would be attended to. No delay should be made in putting forward a telegram from the Committee to the Government of India.

P.S.—The copies of your Committee's letters of the 3rd and 6th instant just to hand, appear to us to form the main

causes which have influenced the decision arrived at by the Government of India, and early action by your Committee is absolutely necessary. We understand the cargo of the *Antoinette,* Devoe's oil, to one of our neighbours, is found "dangerous." This proves there is something wrong in the sampling and testing of oil here, as pointed out to the Committee.

From Government of Bengal to Messrs. Kettlewell, Bullen & Co.

No. 140. *Calcutta the* 21*st June* 1882.

I am directed to inform you that it has been resolved by the Government of India that no oil shall be admitted as ordinary petroleum which does not satisfy the tests established by Act VIII. of 1881 (the Indian Petroleum Act.) The Commissioner of Police, Calcutta, has been instructed to see that any petroleum, not satisfying the requirements of the Act, which has been temporarily landed, is now reshipped and removed from the port within 72 hours in accordance with the undertaking under which the landing was permitted.

From MESSRS. KETTLEWELL, BULLEN & Co.
HOBSON, CONOR & Co.
ERNSTHAUSEN & OESTERLEY.

Calcutta, 11*th July* 1882.

A conference of the importers of Petroleum into this port was held yesterday with the Commissioner of Police and the Board of Analysts, and at which the President of the Chamber was present.

The deadlock to which the trade in Petroleum has been brought, by (as we believe) the arbitrary system of sampling and testing recently adopted by the Chemical Examiner to Government, and followed out by the Board of Analysts, was fully gone into, discussed, and explained, and the parties present were almost unanimous, there being only one dissentient, *viz:* Messrs. Schroder, Smidt and Co., that the only course open to the authorities was to admit the Petroleum now stored at Meteabrooz, as well as all cargoes shipped up to the end of June, on the American certificates. It was felt that the present deadlock, considering the season of the year, and the great want of accommodation for the trade, as well as the want of a sufficient organization to make the number of tests required, or that may be rendered necessary, left no other course open to Government but that referred to, and in this view we coincide.

The Chemical Examiner to Government admitted that Petroleum at 69° or 70° is not less safe than if it tested 73° by Abel's instrument,—in other words, the public would not be better protected by the oil testing up to 73° than if it tested 69° or 70,° and we should direct the attention of the Committee to this opinion.

We have now to advise the arrival of two more ships with Petroleum this morning, *viz.*, *Exporter* and *Hannibal.* These cargoes are sold and may be delivered in the ordinary course of business if the Petroleum is passed by the Chemical Examiner to Government, which we are by no means sanguine of under the present system of sampling and testing. Should these cargoes

not pass the present difficulty and deadlock will be much increased and severe hardship will be suffered. There are still 10 or 12 cargoes afloat, part due or nearly due, all of which will be in the position of the four cargoes now at Meteabrooz, and the two cargoes just arrived.

Our object in addressing you on the subject now, is to request you to be good enough to lay this letter before the Committee of the Chamber as quickly as possible, in the hope that the President and the Committee will see their way to represent the present unfortunate state of things to His Honor the Lieutenant-Governor in continuation of the Committee's letter of the 29th ultimo, and to ask His Honor to order that the American certificates for all cargoes shipped up to 30th June be admitted. We would also ask them to solicit His Honor the Lieutenant-Governor to order that the present system of sampling and testing be relaxed, and that the oil should be tested either from samples drawn into bottles (which would be sealed by the Police) or from tins which have been emptied into an earthen vessel, or *gumlah*, large enough to contain 10 gallons, before being sampled for actual testing.

We see no way out of the present difficulty but to accept the American certificates. We would point out to the Committee that new business in Petroleum is almost stopped: our principals will not entertain any offers whilst the position of the trade is so uncertain here.

FROM MESSRS. KETTLEWELL, BULLEN & CO.
" " HOBSON, CONOR & CO.
" " ERNSTHAUSEN & OESTERLEY.

Calcutta, 13*th July* 1882.

With reference to our letter of the 11th instant, and to the copies of correspondence between the Chamber and the Governments of India and of Bengal, we have further to say that we agree with the Committee in the position that they have taken up as regards the undesirableness of hasty legislation in this matter. Sufficient time has, however, now elapsed for a reconsideration of the question.

It is, we consider, possible to adjust the difficulty which has arisen without having recourse to an alteration of the Petroleum Act, and our main object in now addressing the Committee is to lay before them a distinct statement of our reason for holding this view, and to ask the Committee to assist us, as members of the Chamber of Commerce, in carrying it into effect with the Government of Bengal, to whom, we believe, the question has been referred for settlement.

It seems to us that the absence of Rules to provide for the administration of the Act, and for the sampling of the Petroleum, and mode of application of the test thereto, is, to a large extent, answerable for the present deadlock, and we give below some of the main points where rules are absolutely necessary. We believe our arguments are amply supported by facts, and that it is entirely within the power of the Government to relieve us, and all concerned, without fresh legislation.

The points on which we rest our present argument are as follows :—

First. It has been elicited that the method of sampling the cargoes of oil on arrival in Port has been changed since, or shortly before, the present Act came into force. Formerly the procedure was as follows :—

The Superintendent of the River Police was ordered to proceed on board the ship, and there drew off from tins, which were opened for him on deck, samples of oil, which were then sealed up and taken to the Chemical Examiner to Government, to be tested : under this simple procedure the oil was subjected, previously to being tested, to a process similar to that to which it would be subjected previously to use. The tin, at all events, was opened, and the oil which was to be tested was not hermetically fastened.

There is nothing in the Act to forbid this plan, nor is there anything in the Act to direct or compel the Examiner to alter it. At his own discretion, however, and no doubt with a view to making the test as severely scientifically accurate as possible, the Examiner abandoned this system, and adopted that which is now in force, namely :—In the lid of the tin a small hole is made large enough to admit a glass tube. By this means a portion of the oil is drawn off into a bottle which is at once tightly corked, and the test is made from this sample ; that is to say, under the new method the chemical condition of the oil in the tin, scientifically speaking, is proved ; under the old method the condition of the oil is ascertained as it would have passed into consumption.

It is true the Examiner in reply to this argument says that the short period of exposure allowed to the oil under the bottle system can have little or no effect on the results of the test. If so, that gentleman can have the less objection to revert to the old system.

We need hardly point out the desirableness of a fixed rule on this point. The absence of a rule to provide for the method of sampling and applying the test makes it conceivably possible to render the whole Act, and the test itself, entirely nugatory. Moreover, we would urge that it is not right that it should be in the power of any official to alter the method of sampling and testing of his own free will, and without notice to any one.

The second point we have to bring forward has reference to the testing instrument.

It is extremely difficult to discover what is a correct instrument. We think this fact has been demonstrated by Dr. Warden and Mr. Pedler in testing the cargoes of the "Viscount," "Rossdhu," "Tintern Abbey" and "Celtic Monarch;" each member of the examining Board used a different apparatus, and worked in a separate room. Although operating on the same oil, only in two instances were the mean results identical. There was a difference of from 1° to 2°, and in the separate tests, of as much as 4° in one instance.

It has been proved in England that if several, say 4 or 6, Abel instruments be used for making simultaneous tests on the same subject tin, there is no certainty of obtaining the same result for all. The probability is the

other way. Each gives a different result, and it is impossible to decide which is correct.

This is not a mere allegation of ours. We would refer you to the results obtained by the Chemical Examiners on the cargoes as above.

We would urge that when so much uncertainty attaches to the testing instrument, and when so much depends on the manipulation of the machine by the operator, a stringent scientific regard to the method—in the first place of drawing the sample, and in the second place to the value of the results obtained—is not either necessary or desirable.

The third point we rely on has reference to the description of the test employed.

The Act provides that the test may be applied by means of either, 1st, the flame of an oil lamp, or, 2nd, by a gas jet. The former is the method first mentioned in the Act, and it is the method specified and described in para 3 of the directions pertaining to the Act. We would beg you to observe this, as well as the words of the directions,—"when gas is available it may be used."

It has been found that the oil lamp flame-test gives a much better result than the test by gas jet. We believe Drs. Warden and Waldie put the difference in result at as much as from 4° to 6°. That is to say, if two tests are made simultaneously, on the same subject tin, the oil subjected to the gas jet will flash at 70°, while the oil subjected to the oil lamp flame will not flash below 74° or 76°.

Seeing the Act expressly describes and recognises the oil lamp flame-test, we would urge that it may be adopted as a fixed rule.

Having regard to the admitted uncertainty of the testing machine, we fail to see why such extraordinary stringency should be insisted upon in the matter of sampling and of using the gas jet, and we would strongly urge this point on the attention of the Committee of the Chamber.

We feel confident that if the method of examining the oil, which is now in use, be amended in the following particulars, the difficulty the trade is now in may be removed: namely, 1st, the old system of bottle samples be reverted to; 2nd, the test to be applied with several separate instruments, and the average be taken not of all the results but of those which most nearly resemble each other; 3rd, that the oil lamp flame-test be used instead of the gas jet.

We urge the foregoing strongly on your attention, because we have every reason to believe that if our suggestions, which are entirely within the Provisions of Act 8 of 1881, be adopted, the present deadlock, which cannot fail to increase as time goes on, may be removed without any alteration of the law.

We would conclude by repeating that any hasty legislation on this or any other subject is to be deprecated.

In the event, however, of the arguments brought forward above failing to convince the Government of the possibility of passing the oil now in dispute, and so removing

the present serious and daily increasing deadlock, we would then represent to your Committee that the objection to an amendment of the Act no longer exists on this ground. It is nearly six weeks since the commencement of the public agitation on this subject, and every one concerned has had opportunity to investigate the matter. It is of really most serious and pressing urgency to put an end to the difficulty and prevent the interruption to this new and rapidly increasing trade which has already occurred.

THE INDIAN FACTORIES' ACT.

Your Committee have had submitted to them by the Local Government Mr. Meade-King's very interesting report on the working of the Indian Factories Act in Bombay, and have been asked to express an opinion on the suggestions therein made. As will be learned from a reference to the annexed correspondence that opinion is decidedly opposed to the adoption of Mr. Meade-King's proposals, and it is supported emphatically by the Agents and Managers of the Calcutta Factories, whose views were specially applied for. Your Committee trust that the industrial enterprises of Bengal, which are assuming such important dimensions, will ever remain unfettered by unnecessary legislation; and in this hope they bear in mind not only the interests

of the country and of employers, but also the well being of the labouring population.

From Government of Bengal to Chamber.

No. 1209, *Calcutta, the 8th September* 1882.

WITH reference to the enclosed copy of a letter No. 17—1175, dated the 12th August 1882, from the Secretary to the Government of India in the Home Department, forwarding a general report on the working of the Indian Factories Act in Bombay, and a supplementary report on the application of the Act to small mills and factories, by Mr. W. O. Meade-King, Inspector of Factories, Bombay, together with a summary of the modifications in the law proposed by that officer, I am directed to request that you will be good enough to favor the Lieutenant-Governor with an expression of the opinion of the Chamber of Commerce on the several suggestions made by Mr. King.

The report of the Chamber should, if possible, be submitted within one month from the date of this letter.

I am directed by the Governor-General in Council to forward herewith copy of a general report on the working of the Indian Factories* Act in Bombay, and of a supplementary report on the application of the Act to small mills and factories, by Mr. W. O. Meade-King, Inspector of Factories, Bombay, together with a summary of the alterations proposed by him in the Act.

* Act XV. of 1881.

2. I am to request that the several suggestions made by Mr. King may be categorically noticed by His Honor the Lieutenant-Governor of Bengal when submitting the report, now overdue, on the working of the Indian Factories Act, which was called for in paragraph 5 of Home Department Circular No. 12—710-719, dated the 27th May 1881.

In compliance with instructions contained in Government Resolution No. 1231, dated 4th April 1882, I have the honor to submit the following report on the working of the Indian Factories Act in Bombay, together with certain suggestions and proposals which I was invited to offer for the consideration of Government. In order that I may set forth the result of my observations and such suggestions as occur to me with coherence and regularity, I propose to take the Act section by section, stating what I have found to be the operation of each section, and giving reasons for modification or amendment where I consider it desirable. Before proceeding to that course, however, I desire to offer a few remarks on certain details which have appeared to me, in my tour of inspection, to be of great importance in the consideration of factory legislation, but which cannot be conveniently connected with any particular section of the Act before us.

The thought continually presents itself to my mind that it will probably be considered an act of presumption on my part to propose alterations in an Act which has only been passed one year, by those whose experience of India and her requirements is so much more comprehensive than mine can possibly be. I trust I may not be

considered to have exceeded the scope of my commission. My only desire is to bring to the assistance of Government whatever technical knowledge I may have acquired during fourteen years' experience in the inspection of factories.

General Observations.—Assuming that this Act may be regarded as a foundation stone, I venture to point out for the consideration of Government the direction in which extension may be desirable, when it is resolved that the time for extension has arrived.

Sanitary Provisions.—The total omission of all sanitary provisions struck me at first as being remarkable. Observing with pleasure how beautifully clean the outsides of several of the mills were, I was naturally surprised, on going inside some few of them, to find they had not been whitewashed for two, three, or four years. I think this should be done at least as often as it is required to be done in England, *i. e.*, once every fourteen months, and I believe it is done quite as often as that in some of the Bombay mills. In one mill I found the effluvia arising from some latrines attached to a neighbouring mill so bad, that I felt it my duty to call the attention of the Municipal Commissioner to the nuisance. The work-people in general seem to be allowed ample space, and I have only on one or two occasions had to direct attention to overcrowding.

Ventilation is good in some mills, deficient in others. Some blowing-rooms and carding-rooms have more dust and fluff flying about than there is any necessity for; the temperature is frequently higher than that required by any manufacuring process. I have frequently observed

it at 95°, and in a few mills, where no sufficient means is provided for carrying off the vapours from the process of sizing and mixing the size, the atmosphere is rendered very obnoxious, if not actually injurious, to health.

There are plenty of windows, but a strong disinclination to open them seems to prevail among the work-people. In the spinning-rooms, I know, a certain temperature must be maintained, and a strong current of air is apt to break threads; but considering the low counts which are usually spun in Bombay, more air may be admitted than one usually finds without any detriment to the process.

Roof ventilation and apertures between the windows and roof are very serviceable in dry weather, but have to be closed during the rainy season. Some of the cotton used in Bombay is very dusty, and the carding-rooms in which a thorough current of air cannot be maintained should be artificially ventilated by flues and exhausting fans, and especially where—as I observed in a few mills—the operation of grinding is performed in the carding-rooms. If the grinding machines are placed in a separate room, with a fan arranged under each machine to drive the dust into a dust chamber, the operation may be said to be harmless if the workmen use ordinary care. But I have seen these machines at work in the middle of a carding-room without any means of collecting or carrying away the dust, which, containing a quantity of metallic particles, must of course be very injurious to health. Men engaged at the grinding machines usually tie cloths around their mouths and noses. I found the sizing

machines placed in different rooms—amongst other machinery—sometimes in the weaving shed, sometimes in the reeling or winding rooms. It would be very much better, I think, if the process of sizing could be carried on in a separate building or shed, especially in a hot climate like this. However serviceable the presence of steam may be in some other processes—weaving for example—the acrid steam arising from size which may have been kept too long—and many sizers hold the opinion that it is then most valuable—cannot be conducive to the health of those who have to inhale it. In one mill where the sizing machines were placed in the weaving shed, containing some hundreds of looms, the whole shed was filled with the most acrid steam. The heat of the sizing room, too, is necessarily very great. If there are apertures which can always be kept open through the roof immediately over the machines, the atmosphere in the remainder of the room need not be materially affected, and I admit that in a majority of mills careful attention was paid to that matter, but in others I found quite the reverse.

But if sanitary provisions to promote cleanliness and improve ventilation are needed in what are at present "factories," how much more necessary will they be in those cotton-ginning, wool-cleaning, and similar places in Bombay, which, it is devoutly to be hoped, the Government will ere long see fit to constitute "factories."

Hours of Work.—So far as labour is concerned, the Indian Factories Act protects children under 12 years of age only, and a stranger is naturally surprised to find

that women and all others over 12 years of age are allowed to work from sunrise to sunset every day in the week, including Sundays.

This means in the winter time about 11½ hours, and in the summer nearly 14 hours, of daily labour. The machinery is usually stopped for half an hour in the middle of the day.

True, it is customary to stop work on alternate Sundays for the sake of the machinery, which requires to be cleaned, &c., but the work-people have to be there to clean it, and the Hindu holidays, about 15 days in the year, are usually observed. Children have but little idea of time, and are to be seen lying outside the mills, sometimes an hour or more before the doors are opened. If any person absents himself from the mill for one day without leave, it is customary in some mills to deduct two days' wages. I have endeavoured to ascertain whether factory work is continued for 13 consecutive days, without one whole hour's cessation in the daylight, in any other country in the world. In every country concerning which I have been able to collect information, women and children are not allowed to work in factories on Sundays. I am told, too, that in the Calcutta mills no work is done on Sundays. Can the factory operatives of Bombay bear this continuous strain without injury either to themselves or to those who come after them? Are they stronger, or have they greater powers of endurance, than the operative classes of other nations? I think the reverse is the fact. One usually finds in an Indian mill at least three persons assigned to work that would be

done by two in an English mill. One woman in Lancashire attends to two, three, or sometimes four looms. In Bombay I have generally seen a man at each loom. If the women seen working in the mills are compared with those of the same race and class working outside the mills, a very marked difference in favour of the latter cannot fail to be observed. At present the women are not, in many mills, working as long as the men, but it is necessary to consider what the Act allows, and what will undoubtedly be the practice as mills increase—and they are increasing very rapidly—and manufactures become busy again, if the Act remains as it is. I have searched the evidence given before the Commissioners appointed to enquire into the condition of the operatives in the Bombay factories in 1875. Of 22 witnesses examined, eight were of opinion that mills should be closed every Sunday, and six thought there should be one day's rest in every seven, while an eminent physician testified that a day's rest after a week's work was a physiological necessity. One naturally asks whether wives and mothers (supposing their constitutions and minds are capable of bearing this continuous work of a monotonous character) have no home or domestic duties that require attention, or whether the young people should not be allowed some time for recreation, or some opportunity of enlarging their ideas by learning *something* in addition to the one branch of a trade in which they are engaged from day to day. The only answer I ever hear from dissentients is, that the work-people do not want any relaxation; therefore why force it upon them, and needlessly strangle the manufacturing industry still in

its infancy. The first part of the answer is possibly true. Many of the factory operatives have experienced the horrors of famine, and being now in a position to earn more than ordinary wages, hesitate to run the risk of sacrificing a few annas for a gain of which they know not the value. But it is questionable whether this fear, apathy, or indifference on the part of the Indian factory operatives does not demonstrate more than anything else the necessity of doing something to improve their condition, to elevate them from the degrading effects of excessive monotonous labour to a higher view of their family and industrial life. The history of factory legislation in England will prove that judicious improvement of the condition of the work-people will never injure the manufacturing interest. On the contrary, the surest guarantee of productiveness has been said to lie in proper conditions of labour. The English Legislature extended its protection to women and children, gradually and steadily, in the face of a powerful opposition, but it cannot now be denied that the Factory Acts have conferred the greatest possible benefit on the operatives, while the employers are realizing the advantage to be derived from a superior set of work-people.

To the alarmists I would commend the words of Sir James Graham, addressed to the House of Commons after he had for many years strenuously opposed all interference with factory labour. He said, "I have a confession to make to the House. Experience has shown to my satisfaction that many of the predictions formerly made against the Factory Bill have not been verified by the result, as, on the whole, that great measure of relief of

women and children has contributed to the well-being and comfort of the working classes, while it has not injured their masters. By the vote I shall give to-night, I will endeavour to make some amends for the course I pursued in earlier life in opposing the Factory Bill."

I venture to submit that women, young persons, and children, should have one day's rest in every seven days, and that that day should be permanently fixed by the Legislature, and that on the remaining six days they should not be allowed to work before 6 A. M., or after 6 P.M., and that they should have one hour's interval for food and rest. It is not too much to predict that such legislation, while adding materially to the daily comfort and well-being of every woman and child working in the factories, will tend to promote in succeeding generations that energy and vigour which are at present so conspicuous by their absence.

Certificates of Age and Fitness.—The efficiency of the Act, so far as it relates to children, seems to have been considerably impaired by the inadequacy of means provided of ascertaining the ages of children with any degree of accuracy. This difficulty evidently became apparent very shortly after the Act came into force, and was temporarily met, or attempted to be met, in a commendable spirit by the Collector of Bombay, who was charged with the administration of the Act in the Town and Island of Bombay, realizing the importance of the age question; and finding objections raised by occupiers of factories on the one hand, and by certifying surgeons on the other, he undertook, as Inspector of Factories to examine and

certify all the children himself. In the first instance, he visited the mills and certified all the children he found in them, and afterwards allowed all the newly engaged children to be sent to his office for examination.

A glance at sections 4 and 5 shows that such a course was not contemplated when the Act was passed, and the reasons are manifest why the practice, useful as it may have been while the Act was in its infancy, should not be continued longer than is absolutely necessary.

The best evidence of age, when available, is of course a certified copy of registration of birth, and if registration was made generally compulsory, it would be easy to make the production of such a certificate the first condition of employment. Finding that the Bombay Municipal Act provided for the registration of births within the Presidency Town, I obtained the assistance of the Municipal Commissioner and Health Officer in ascertaining to what extent we could avail ourselves of such registration for Factory Act purposes, with the following result. Out of 45 children casually collected in a factory, we found that seven only were born in Bombay, and when search was made for the registration of those seven births, one only could be found. In the Presidency there is no registration of births. This mode of proving age must therefore be abandoned for the present. Vaccination certificates might also be made available as evidence of age, but if vaccination is *now* compulsory, it has not been so long enough to serve our purpose. For many years the certifying surgeon's certificate was the only proof of age required by the English Factory Acts, but a long experience

taught that the avidity of parents, striving to obtain "full-time" wages for their children's work, the deception of children themselves, and the irregularity in their physical development, too often baffled the skill and care of the surgeons, and children were constantly found working "full-time" long before their real ages warranted their promotion from "half-time" employment.

The Factory and Workshop Act of 1878 remedied this by providing that no certificate of fitness for employment should be granted except on the production of a certificate of birth or "other sufficient evidence" of age. In the absence in India of certificates of birth or other documentary evidence of real age, I am strongly of opinion that the certifying surgeon's certificates provided for by sections 4 and 5 should be made compulsory, and not be left dependent on the possible order of an Inspector, or the request of any person employed or about to be employed. Many children working in factories must of necessity escape the observation of the Inspector, not a few will take care to keep out of his way, and many will neglect to apply for certificates when ordered to do so by the managers of the factories in which they work. Apart from the question of age, it appears most desirable that children seeking employment in factories for the first time should be examined by the certifying surgeons, with a view to testing their physical fitness for the work to be allotted to them. Nothing has impressed me more in the course of my inspection of the Bombay mills than the unhealthy, stunted, and puny appearance of a great number of the children whom I have seen at work, and I find that a similar impression has been made on the

minds of professional men who have had the same opportunities that I have of seeing the children, and who are better judges of their condition.

If certifying surgeons believe them to be of the required age, they are obliged to grant certificates, which they frequently do with great reluctance. Two or three have told me how much they have regretted, on different occasions, that the Act gave them no power to withhold certificates on account of physical incapacity. When pointing out these pitiable specimens of humanity to managers, I have been told that they came from the country in that state. Very possibly. But, if so, is factory work in a heated and dusty atmosphere a change of condition from which they are likely to derive benefit? Is it not far more likely to confirm their weakness or maladies? I submit, therefore, that *all* children should be examined by certifying surgeons previous to employment in factories, and that they should be certified as to their physical fitness as well as their age.

Obstruction.—The Act contains no provision for the prevention or punishment of obstruction. I have no reason to anticipate any act of wilful or flagrant obstruction, but in the absence from the mills of the higher authorities, I have occasionally found the subordinates needlessly alarmed by the sudden appearance of an Inspector. I have found them every now and then, not frequently I admit, busily engaged in hustling all the smallest children they can meet with out of the mill.

I think it desirable, when any amendment or extension of the Act is under consideration, that some such provision

as that contained in section 68 of the English Factory Act of 1878 should be inserted.

Registers.—Occupiers should be expressly required to produce registers, &c., as well as to keep them.

Wages.—Just a word on the subject of payment of wages, though I fear it scarcely comes within the scope of my enquiry. It seems to be customary to pay the operatives monthly, payment being made in about the second week of one month for work done during the preceding month. I have been told that this system conduces to, if it does not actually compel, a habit of borrowing at exorbitant rates of interest, and money-lenders may often be seen hanging about the factory gates in Bombay on pay-days, ready to pounce upon their prey.

It is not perhaps a matter to be settled by legislation, but I am convinced it would be a great advantage to the work-people if they could be paid weekly instead of monthly.

Commission of Medical Men.—Should Government be of opinion that the time has not yet arrived for any extension of its protection to women and children, I beg respectfully to suggest for their consideration the appointment of a small Commission, consisting of two or three members of the medical profession, to enquire into and report upon the health of women and children engaged in factories, with reference to the hours and ages of employment.

Operation of the Act and Proposals for amendment.

Section 2 (b).—It seems very important that this

proviso, exempting places in which less than 100 persons are employed from the operation of the Act, should be reconsidered.

There is abundant evidence to show that small factories and workshops generally need even closer and more frequent inspection than large ones. The occupiers of the smaller places are often men whose pecuniary circumstances do not admit of their going to the best market for their machinery, or of paying much attention to the sanitary condition of their workshops and the comfort and well-being of their work-people. Nor do the profits, as a rule, warrant the employment of a skilled and careful manager to exercise such supervision as is necessary in the absence of the master, who cannot always be on the spot. And, again, those who possess the least amount of machinery are apt to make the greatest possible use of what they have, and this entails excessive hours of manual labour, and occasionally night work, *the* two conditions of labour in which so-called "accidents" are of the most frequent occurrence.

The work-people get tired and sleepy, and fall amongst dangerous unguarded machinery often from sheer exhaustion. A sad example of this most painful description of accident, was reported to the Secretary to Government by the Coroner of Bombay in March last.

Manufacturers who are at present subject to the Act may naturally consider that they are unfairly burdened in the labour market, if not otherwise, while they have to compete with those who, employing less than 100 hands, are in a position to take every advantage of the

immunity which the law at present allows to them from both restriction and inspection. Permission to employ children as long as they please, without having to appoint fixed interval for meals or rest and other privileges, must, especially when so much is done by "piece-work," give a two-fold advantage to those who possess them. Previously to 1878, when a distinction was drawn by the English Acts between certain classes of factories and workshops, the line of demarcation being the employment of 50 persons, some manufacturers were known to have purposely kept down the number of their work-people, in order to escape the more restrictive provisions to which they would have been subject had they employed more than 50. There is no reason to suppose that manufacturers in India will be differently influenced. It may readily be supposed that factories in which less than 100 persons are employed are apt to become places of refuge for children rejected or discharged on account of their tender age from surrounding mills in which they have sought employment. Those parents who are anxious to make their children contribute to the maintenance of the household at the earliest possible moment, will not be slow to discover such means of evading the restrictions imposed by the Act. And, if so, how much better that they should work in places where some regard must be paid to their hours of labour and personal safety. The Commissioners appointed to enquire into the working of the Factory and Workshop Act (England), 1876, reported (paragraph 19) "that there is no reason whatever why the regulations for securing such matters as the protection of life or limb from dangerous machinery,

or even, in general, the limitation of the hours of labour, of persons whom it is expedient to protect, should be deliberately made less efficient in the smaller places of work, where they are likely to be more needed, in proportion to the greater facilities for escaping observation, than in the larger." For the reasons which I have mentioned I venture strongly to urge the reconsideration of this definition with a view to the *total* repeal of paragraph "*b*." I say "total repeal," because I submit that all the arguments produced in favour of it would be equally applicable to any given number that may be proposed as a substitute for 100.

"*Child.*" As I have elsewhere referred more fully to the ages, condition, and employment of children, to whom I have given particular attention during my tour of inspection, I will here only suggest that the age of *thirteen* is quite young enough for a child to commence "full-time" work in an Indian factory, and that this definition should therefore be altered by substituting the word "thirteen" for "twelve."

An additional reason for this alteration arises from the impossibility of ascertaining the exact age of children, and the fact of the benefit of the doubt being usually given to them, who (on their parents' account perhaps) are doing their utmost to obtain "full-time" employment.

That the change may be introduced gradually, such a proviso as this may be added to the definition: "Any child who, previously to the commencement of the year 1883, has been duly certified to be above the age of 12 years, may continue to be employed in any factory in like manner as if he were a child above the age of thirteen years."

"*Employed.*" The following words might with advantage be added to this definition:—

"If a person above the age of eight years is found in any room or part of a factory in which any manufacturing process is carried on, except while all the machinery of the factory is stopped, such person shall, until the contrary is proved, be deemed for the purposes of this Act to have been then employed in the factory."

I have frequently found children working in mills in which I have a few minutes previously been told that no children were employed. In one such instance, I found as many as 15 children working in a weaving shed. Being "learners," managers and overlookers are apt to ignore the employment of them, and to consider that they are not affected by the Act. I have constantly been told, when questioning such children, that they are "not employed in the mill," although they may have been seen at that moment hard at work.

The introduction of such words as I have proposed would at least cause some managers and overlookers to exercise more careful supervision in this matter than is at all times their wont.

Section 3.—Without in any way anticipating the views of the Government with regard to the future administration of the Act, I may be allowed to point out that, useful as accompanying assistants often are to Inspectors when visiting factories, assistants with an independent right of entry into factories, acting under the Inspector's directions, and able to visit any particular factory at any given

moment, may be able to render the most valuable services. If, for example, the Bombay Government thought fit to appoint an Inspector of Factories resident at Bombay, local officers, whose new duties would be almost nominal, could be appointed in various parts of the Presidency, in or near which factories are situate, to act as Assistant Inspectors when required by the Inspector. I merely throw this out as a passing suggestion for the consideration of Government, believing, as I do, that they *may* find the power to appoint Assistant Inspectors as well as Inspectors of Factories very useful.

Section 4.—If the preceding suggestion is adopted, section 4 should of course commence "Any Inspector or Assistant Inspector of Factories may," &c.

Section 4 (*c.*)—This clause confers on an Inspector power to immediately discharge, or suddenly to restrict the hours of labour of an unlimited number of children in any factory. The exercise of such a power by an Inspector may entail the stoppage of one or more departments in the mill, and it is impossible to estimate the damage that may be sustained by the mill-owner, who, if he *has* committed an offence against the Act, will have already rendered himself liable to a commensurate penalty. For this and other reasons, which I have mentioned in my general observations, I submit that this clause should be repealed.

Section 5.—By this section, any child "desirous of being employed" may demand examination and a certificate from the certifying surgeon, and there is nothing to prevent an unlimited number of children from calling

upon the surgeon, believing that the possession of his certificate will go far to insure employment in some mill. A certifying surgeon told me that he regarded this as a very probable result. In a thickly populated manufacturing district, like Bombay, this may cause a very material and unnecessary addition to the duties of the certifying surgeon; and again, if children are allowed to present themselves to the surgeon for examination unaccompanied by some responsible person from the factory in which they are about to be employed, there is reason to fear that a wide field will be opened to a practice of personation, or even of traffic in the certificates. I am loath to say, in the absence of any direct proof, that such practices are already in vogue, but it must be apparent to any observant person who walks leisurely through the mills, that a large proportion of the children employed "full-time" in the Bombay factories, on the strength of certificates that they are above 12 years of age, are in reality under that age.

A certifying surgeon told me the other day that in the course of one morning three children, giving the same name, called on him for certificates. If the surgeon's certificates are granted only at the request of any occupier of a factory or his agent on the production of the recently prescribed register, in which the names of the children will have been entered by the occupier, the objections to which I have alluded will be removed.

Section 6.—Provides that no child shall be employed if he is under the age of seven years. Admitting that the younger a child is trained to factory work, the more pro-

ficient he usually becomes, I think the minimum age may reasonably be fixed at eight instead of seven. We must remember that the youngest child in a mill is engaged at the same work as the child between 11 and 12, during the same number of hours, in the same atmosphere, and we should also remember the risk that these very young children run of getting caught in the machinery. I think I have only seen one or two children under eight working in factories since I came to India, and we may safely infer that in the Bombay Presidency children under eight are not wanted, and are only engaged under very exceptional circumstances, in consequence of the earnest solicitation of parents, or of their own precocity.

Section 7.—This section, restricting the daily employment of children to nine hours, and requiring certain intervals to be given for food or rest, seems to be incapable of enforcement, and to have caused more difficulty and dissatisfaction to mill-owners and managers than any other section of the Act, and the practical effect of it has been (unless some other cause of which I am ignorant has been in operation) the absolute dismissal of some hundreds of children for whose protection the Act was passed. Up to the 1st July 1881, when the Act came into operation, children (under 12) seem to have been employed in large numbers in all the 31 mills in the Island of Bombay except *one*, and in all the other 11 mills in the Presidency without an exception. At that time notice was given by the occupiers of two mills, in one of which 250 children were then employed, in the town of Bombay, and of three mills in the Presidency, of their intention to dis-

continue the employment of children under 12. After six months' operation of the Act, it was reported that the employment of children under 12 had been discontinued in *twelve* of the mills in the town of Bombay, and in *four* of those in the Presidency. At the present time children under 12 are not professedly employed in *sixteen* of the mills in the Town of Bombay, and 465 is the aggregate number of children in the remaining 15 mills. Such a result, I am sure, was never anticipated or desired. In some few instances I have been told that children of 12, who may work as long as the engine runs, are to be had at the same rate of wages; therefore, it is said, why should occupiers lose four or five hours' work of each child per day? That reason has, as I observed, been assigned but seldom.

A far more general reason is the difficulty experienced in working in accordance with the terms of the section and Government rule 12.

Managers have told me again and again that in the present state of the law it is utterly impossible to employ children without running a daily risk of violating the Act, and having to pay a penalty for an offence which they have done their utmost to avoid. The fact is that being neither "half-timers" nor "full-timers," there is nothing to mark their time of commencing or finishing work nor the intervals to be allowed to them; all this has to depend on overlookers or "jobbers," who have an abundance of other matters to attend to. Different plans have been attempted: in some mills *one* period of employment has been fixed, as, for example, from 7 P. M. to

5 P. M. with an hours' interval in the middle of the day; in other mills different periods are fixed for different sets of children; for example, one set from 6 A. M. till 6 P. M. with an interval from 10-30 A. M. till 1-30 P. M., and another set from 10-30 A. M. till 6 P. M., with two intervals of half an hour each. The first method, fixing one period of employment only, is possible, but as the machinery is only stopped for *half an hour* in the middle of the day, and the children rarely leave the mill, it is scarcely probable that they will abstain from work for *an hour*, nor are they in all mills very particular about the time of commencing and leaving. It is, however, preferable to the second method, which I can but regard as utterly impracticable: in nearly every mill in which I have seen it attempted the accounts given by the children of their periods of employment and intervals for food, &c., have essentially disagreed with the stated periods fixed by the mill authorities. On taking 12 children out of a mill at 6 o'clock one evening, and questioning them separately, each one said that he had been in the mill since the machinery was set in motion at about 5-30 A. M., and had attended no school in the meantime, though I was assured that all the children in that mill were compelled to attend school in the mill for three hours each day. I saw two children sitting on a form in the lodge, and was told that was the school. It was needless to add that the schoolmaster was abroad on that occasion. Several managers have told me, and convinced me, that it is quite impossible to adhere strictly to the stated intervals for food and rest. Circumstances in this respect differ materially from those in England. The children here are allowed to take,

and are in the habit of taking their meals at odd times and odder places all over the mills. This appears to be the custom of adults as well as of children. It does not therefore seem necessary to insist on any particular periods being fixed for that purpose, provided the total period of employment be not too long.

The children appear to relieve each other. It would be difficult to pass through a mill at any time in the forenoon without seeing some children perched about in nooks and corners, devouring their meals, and evincing little less anxiety to escape observation and contact than to satiate their appetities.

Reference to the detailed reports of my visits, given in the office register forwarded herewith, will show that in almost every mill in which children are employed, irregularities with regard to their employment have been observed, and in no single instance have I been able to satisfy myself that the stated intervals for food and rest have been adhered to. In many cases it is quite impossible to ascertain whether these provisions of the Act are complied with or not.

The dismissal of the children as a means of avoiding the difficulty is to be deplored, if only on the ground that to them, most certainly "half a loaf is better than no bread."

I am led to think from past experience in similar circumstances, that the extension of the age of childhood from 12 to 13, which I have suggested in the early part of this report, will have the effect of re-introducing children to

some of the mills from which they have been discarded. Many of those who determined to dispense with the services of all under 12, will very probably arrive at a different conclusion when the question relates to all under 13. But another and more important remedy which I desire to suggest, after consultation with many experienced men who have been connected with Indian mills for a number of years, is a further restriction of the hours of work, needed on all grounds, coupled with an abolition of the fixed intervals to be allowed for meals and rest.

My proposal is, that the children should be allowed to work for six instead of nine hours, either from the time the engine starts in the morning till the midday stopping time, or from the midday stopping time till closing time in the evening; that no child who had been employed before noon should be employed in the same or any other mill, after one o'clock P. M. on the same day.

This leads to the chief objection to the proposal—the possibility of children working during the forenoon in one mill, and the afternoon in another; but I think if the factory registers receive due attention, and if the children's parents or guardians are made jointly liable with the employers for any infringement of this regulation, they will be of rare occurrence. It is by no means improbable that in some mills in which large numbers of children are employed, schools will be opened by the occupiers, and thus the most profitable occupation will be supplied to the children for the half-days when they are not at work in the mill.

I think the prescribed notice mentioned in this (7th) section should be required to be set up and maintained in every factory, whether children are employed or not.

Section 8.—Occupiers seem to experience no difficulty in complying with this section. Notices fixing the four days to be given to the children are sent with regularity. I have only had to write to one factory (in which I knew children were employed) to remind the occupiers of their obligation. For the month of May, notices fixing the holidays were received from 13 factories; in six of these the four Sundays in the month were the days appointed, and five of the remainder gave three of the Sundays. For the month of June notices were received from 14 factories, and seven of these fixed the four Sundays in the month for holidays, and five of the remainder appointed three Sundays. I mention this as an indication (amongst others which I think have been given) that there is a disposition amongst many of the mill-owners in Bombay to close their mills on Sundays.

Section 11.—This section has not received that care and attention at the hands of occupiers which are due to its importance. Detection of regularity or irregularity in the employment of children is much facilitated by a well-kept register, and is, on the other hand, rendered most difficult, or even impossible, if the register is neglected. In many of the Bombay mills, I found *no* such register as that prescribed by Government kept at all. In others, sheets of paper containing lists of children, who were said to have at some time obtained certi-

ficates from some one, took the place of the register, but, except in a few very well-regulated mills, it was hopeless work attempting to find any given child's name in the so-called register. It is of still more importance that a correct register should be kept of those children who have been recently promoted from short-time to full-time employment. If an Inspector questions the full-time employment of an unusually small young person, the manager, who is careful to abide by the law, points with pride to his authority, a certificate that the person in question has attained the required age. A form of register for this purpose was also prescribed by Government, but I cannot report that they are generally kept. If I ask to be allowed to see such a person's certificate, I am usually told that the child took it home, or that it has been lost, or at best, is only forthcoming after a very prolonged search. I have already attempted, with the sanction of Government, to remedy these defects by combining in book form the forms "B," "C," and "D," prescribed for the registering and certifying of children, and have sent a copy of the book, with instructions for its use, to every mill in the Presidency.

Occupiers should be specially required to produce this register when called for.

Section 12.—In thirteen of the factories which I have visited, I have observed serious deficiencies in the fencing of fly-wheels and engines. In many instances there has been no rail or fencing of any description around either fly-wheel or engine. I have been assured in every instance that my complaint on this score

shall receive prompt attention, and in a few of the worst cases I have since verified the assurance.

Section 12 (*b*).—Factory buildings in Bombay are, comparatively speaking, so low—scarcely ever exceeding two, or, at the outside, three stories—that hoists and teagles are but little used. In the few mills in which I have observed them, the approaches were by no means securely fenced. In other respects the machinery and mill-gearing are well fenced. Nearly all the machinery has been made in Lancashire, and the requisite shields for the protection of the dangerous parts have been sent with the machinery.

In one or two of the oldest mills, some of the cog-wheels are left a little more exposed than those supplied at a more recent date.

Section 13.—Forty accidents have been reported to me during the two months that I have been here. As this number includes many of a most trivial nature, it cannot be considered excessive. In some cases the reports have not been made in the prescribed form, and the information concerning them has been meagre. I forward a copy of form used in England for the purpose of reporting accidents, published by authority, and purchased by occupiers of factories. In Bombay some similar form would, I think, be found serviceable. The most serious accident reported to me happened to two men engaged at the top of a ladder, in placing a strap on a pulley: one man died from injuries received, the other had an arm broken. Such accidents, which are far too

common, may be almost said to be preventible by the use of a stick shaped like an elongated crutch, but it is useless to recommend its adoption, as the work-people never will take the trouble to use it, except for two or three days after the occurrence of a bad accident. Three or four injuries, though not of a serious nature, have been inflicted by shuttles flying from looms. I am not aware that any means have been discovered of preventing the occasional escape of shuttles from the looms, and it would be too much to expect wire netting or similar protection to be placed on each side of every loom, or between every two; but I have observed in several weaving sheds in Bombay that the windows have such protection.

Conclusion.

While considering the suggestions and proposals which I have ventured to offer with a view to amendment and extension of the Indian Factories Act, I have endeavoured to bear in mind, that although at the present moment there are less than 70 factories in the Presidency of Bombay, there is every indication that in the course of a very few years the number will be doubled or trebled. The number will doubtless also increase rapidly in other parts of India. If the extension of protection to women and children which I have suggested is not *absolutely necessary* now, each succeeding year will add to the necessity for it: deterioration of the race of factory operatives will ensue; and whatever opposition there may now be to factory legislation, such opposition will surely grow as the number of factories

increases, for *they* dread it the most who have yet to experience the advantages to be derived from it.

I have not arrived at my conclusions without consulting certifying surgeons and other well-known members of the medical profession, as well as those whose philanthropy has led them to take more than ordinary interest in the well-being of the working classes.

Nor have I neglected opportunities of collecting every possible information with regard to the habits and customs of the operatives in their domestic as well as in their factory lives.

Before closing my report, I wish to express my grateful acknowledgment of the uniform courtesy, attention and assistance which I have received from secretaries and managers of mills. I have been assured on all sides not only of their desire to comply as closely as possible with the provisions of the Act and the rules of Government but also of their willingness to adopt any suggestion that I might deem it my duty to offer with regard to fencing of machinery, &c.

I am not so vain as to imagine that such blind confidence is placed in the judgment of a comparative stranger in consequence of any personal merit of his own.

I rather recognise in it a desire on the part of the mill authorities, who have spent the best part of their lives in factories, to see the executive administration

of the Indian Factories Act placed in the hands of one who has been intrusted with the administration of similar law, and trained to the inspection of similar factories.

Lastly, I desire to place on record my gratitude to Mr. Kharsetji Nasarvanji Sirvai for his willing and able assistance during my official visit to Bombay. His perseverance and ability will doubtless insure his eventual advancement in the service of the Government, but in the meantime I venture respectfully to request that the services which he has rendered to Government through me may not be lost sight of.

From Chamber to Government of Bengal.

Calcutta, 10th October 1882.

The Committee of the Chamber of Commerce direct me to acknowledge the receipt of your letter No. 1209 of the 8th ultimo, forwarding copies of reports on the working of the Indian Factories Act in Bombay, and of its application to small mills and factories, by Mr. Meade-King, Inspector of Factories, Bombay, together with a summary of the modifications of the law proposed by that officer.

The Committee desire me to state that in their judgment, fortified by the opinion of the Agents ant Managers of mills in this presidency, the remarks which have been submitted by Mr. King on the factories in Bombay have but little force or bearing as regards the mills and factories in the neighbourhood of Calcutta, for Mr. King bases his report

on observations on the Bombay mills only, and several of the alterations proposed are not applicable to the Calcutta mills, where the evils which his amendments are meant to remedy do not exist, *viz.*, defective sanitary arrangements, excessive hours of labor, and Sunday work.

It is a matter of much regret that for the mere sake of legislative uniformity any endeavour should be made to burden the manufacturing industries of Bengal with rules and regulations which may be considered necessary for the better protection of the operatives in factories in Bombay, but which are absolutely uncalled-for as far as Calcutta is concerned.

The greater number of the mills and factories are situated in the suburbs of Calcutta, mostly on the banks of the Hooghly, or in close proximity thereto, with all the advantages of the healthful influence of a large stream. Sanitation is well cared for; the work-people have an inexhaustible supply of drinking-water, and free access to the river for bathing: latrines are provided and kept in proper order; and the arrangements for ventilation and promoting the health and comfort of the people are all that could be desired. Indeed, the operatives, especially the children and young persons, have the freest opportunities of a far healthier life than they can possibly possess in their crowded huts surrounded by a vitiated atmosphere, and all the evils arising from contaminated tanks or stagnant pools, neglected drainage, and the impurities that abound in native villages.

The interest of the work-people is, in these respects, fully recognised as identical with the success of their employers;

and the competition for labor is so keen that it will place at a disadvantage any mill or factory that may be deficient in any of the conditions necessary to secure the health of the employés.

Work in mills on Sundays is seldom or never resorted to, and may be said to be unknown, except when repairs to machinery may be necessary. Press-houses are an exception in this respect during the busy season; no children, however, are employed, and only a comparatively small number of women; but frequently work is slack on week days, and sometimes presses are absolutely without any work. In these, too, work is generally done under contractors, the engines and machinery alone requiring skilled labor, which is supervised by the proprietors themselves.

The question relating to the age of children and of their capacity for labor had the attention of the Chamber when the original Factories Bill was under consideration, and their views were fully communicated to the Government of Bengal in a letter, dated the 22nd February 1879; and the Committee are not aware of any circumstances that would justify the disturbance of arrangements which now exist between laborers and their employers.

The proposed alteration—in section 2 of the Bill—of the age of young persons from 12 to 13 years is regarded with the strongest objection, as likely to be the means of depriving factories of the labor of many boys as spinners, who are quite capable of doing a light kind of work well suited to them, and requiring only ordinary attention on their part. In this country children reach maturity much

faster than at home, and at 12 years of age are quite equal to the light factory work in which they are employed.

Sections 7 and 8 contain provisions as to hours of labor which are considered specially disadvantageous to the mill industry of Calcutta, and at the same time, of no benefit to the employés.

The reduction under section 7 of the limit of working hours for children from 9 to 6 will largely increase the working expenses of the mills, as so many more hands will be required; the work to be done by children is very light and intermittent, and they have constant opportunities for resting; and it is questionable whether the provision will have the intended benefit, as the children would not fail to make as much as they could by going to other mills when released from work at their own regular place of employment, notwithstanding the proposed prohibition and penalty in this respect.

Section 8.—A. proposes to prevent the employment of females and young persons before 6 A. M., or after 6 P. M. This is regarded as simply restricting labor to 11 hours, for, as the services of women are required at all working times in several of the mill departments, men would also be similarly prevented from work, and the mill would in consequence be stopped, and the general manufacturing industries severely inconvenienced.

In the hot-weather months work is continued for close on 14 hours, but it is so arranged by a system of shifts, or relieving hands, that no individual woman or young person

has more than 10½ to 11 hours work in the course of the day; and these hours are so interspersed with intervals, that they are not equal to the same number of hours in an English factory. To work 14 hours, work must of necessity, be commenced before 6 A.M., and or continued after 6 P.M. The proposed alteration would have the effect of completely closing the mill during the best working time —before and after the heat of the day—and of having the work done during the hottest hours.

It has been represented to the Chamber that the matter of schooling for children employed in mills and factories should not be recognised by the Act, and it is suggested that if relaxation from physical labor is needed, attendance at a school-room is by no means the most appropriate means of affording such relief. There is, moreover, an aversion on the part of children to enforced schooling, and there appears to be no use in reducing the hours of work to enable children to attend voluntarily.

The inspection of the sanitary and other conditions of factories, &c., should not, it is represented to the Chamber, be left to an assistant of the Inspector of Factories. So much power is given to an Inspector that, if so disposed, he can raise such vexing and harrassing objections as to seriously interfere with the working of a mill. It is important that Inspectors should be of such a class as to place beyond doubt the honesty of the means employed to enforce the law; and probably an Inspecting Committee, upon which mill owning interests were represented, would be sufficient, and periodical visits without previous notice would serve to discourage any abuses.

As a rule, workmen in mills and factories are paid weekly; the artisan class only—such as assistant engineers, vicemen, tindals, &c.,—receiving monthly wages.

The Committee of the Chamber are not aware of the establishment of any woollen manufactures near Calcutta, and Mr. King's remarks as to the injurious effects of that industry upon the health of the operatives cannot be rightly judged of here, nor their beneficent purpose properly appreciated.

The Committee having thus noticed the salient points of Mr. King's proposed amendments of the Factories Act, are of opinion, that whatever weight his suggestions may be entitled to as applicable to establishments in the Bombay Presidency, they are altogether uncalled for by the conditions prevailing on this side, and would be attended with most mischievous results.

The Committee believe that the manufacturing industries of this Province are conducted with every regard for the well-being of the thousands of operatives to whom they give employment, and they, therefore, see no sufficient grounds for the proposed amendments of the Act.

In conclusion, the Committee have to express their earnest hope that the influence of English manufacturers, who view with a well-founded jealousy the rising industries of cotton and jute factories in India, has not as much (or more) to do with this Factory Act as a desire to protect the Indian operatives. The agitation in favour of the Act was begun in England; no sign of discontent has ever been visible nor sound of complaint heard in

Calcutta on the part of the people themselves. The fact that the real interests of employés and employed are identical is clearly recognized and acknowledged by these mills; and the intervention of such an Act as that now proposed can only result, so far as Calcutta is concerned, in injuring the best interests of those for whose protection it professes to interfere.

PROPOSED GREATER PUBLICITY TO MEASURES UNDER CONSIDERATION OF THE LEGISLATURE.

It is certainly a step in the right direction on the part of the Government to place it in the power of the public at large to acquaint themselves with the nature of the measures about to be proposed by the Legislature. Indifference on the part of the public is common, until the effects of an Act are felt, but it is none the less to the general interest that the principle of publicity of all measures proposed shall be admitted to be a maxim of State by the Government.

From Government of Bengal to Chamber.
No. 846 $\frac{J.}{D.}$, *dated Darjeeling the* 9*th October* 1882.

I AM directed to forward the accompanying copy of a letter No. 1032, dated the 9th September 1882, from the Secretary to the Government of India, in the Legislative

Department, on the question of giving greater publicity to measures under the consideration of the Indian Legislative Council, and to request that you will be good enough to move the Chamber to favor the Lieutenant-Governor with an expression of their opinion upon the subject.

As the Government of India have asked for an early answer to their letter, I am to request that your reply may, if possible, be submitted before the end of the current month.

I am directed to invite the attention of His Honor the Lieutenant-Governor to the question which has been recently raised in the Legislative Council and in the Press as to the possibility of giving greater publicity to measures under the consideration of the Legislature, and to request that the Government of India may be favoured with any suggestions which His Honor may desire to make for the improvement of the existing procedure generally, and, in particular, in regard to the points to be presently referred to.

2. I am, in the first place, to observe that more direct steps are already taken by the Government in India than are taken in England to make the bills before the Legislature known to the public. In Bengal, and it is believed in other parts of India, the Vernacular Gazettes are sent to all the courts, and are there read by the pleaders and muktears. Public bodies of weight or influence are consulted on bills of importance. Besides the large Associations to which the Local Government refers direct, there

are local Associations which the district officer usually consults. Every district and sub-divisional officer is expected not only to express his own opinion but also to ascertain the opinions of the natives around him; and, as a matter of fact, the papers which are printed regarding important Bills commonly contain many valuable opinions from Native Associations and from individual native gentlemen.

It must, however, be borne in mind that some of the most important Bills which come before the Council, and, in particular, measures like the great codifying Bills, in connection with which this question has arisen, are, no matter how clearly they may be drafted, of such a nature that, even with the aid of the fullest explanations, none but experts can hope to master their contents sufficiently to offer any useful criticism on them. Similar measures meet with but little criticism in England outside professional circles, and in India the prospect of obtaining useful criticisms on measures of this class is much diminished by the difficulties of translation to which I am presently to refer.

3. The Governor-General in Council would not have it supposed that these observations are made with any view to deprecating further efforts being made to attain the object desired. He is, on the contrary, fully sensible that it is the duty of the Government to give the largest practicable amount of publicity to legislative proceedings, and to afford the public every opportunity of examining them and expressing an opinion upon them, and he is satisfied that more can be done in this respect than is

done at present. The matter is, however, I am to observe, one which is not altogether in the hands of the Government. The Press is the most effective agency for bringing the measures of the Government before the public, and securing for them a full discussion. Without its co-operation little can be done; and the first aim of the Government accordingly should be to give the Press all the information in its power as to the object and necessity of any proposed legislation.

4. Bearing this in mind, the first change in the existing practice which is contemplated by the Government of India is the publication of a fuller and more popular Statement of Objects and Reasons, showing why the measure is required, and giving a short history of the circumstances which have led up to it, and an explanation of the effect it is likely to have on the subject-matter and on the people. Pains will in future be taken to make such statements as clear and intelligible to the ordinary unscientific mind as possible; and when the Bill has been brought in, the Bill itself and the Statement of Objects and Reasons, and (when this appears desirable) the speech made by the Member in charge in moving for leave to introduce it, will be printed in separate form on cheap paper, so as to be available (with the translations to be presently referred to) for gratuitous distribution to the Press and to such Municipalities, Local Boards and Associations interesting themselves in public questions as it may be considered desirable to supply them to. These papers will further be sold at a low price to the public, and might be made available for perusal without fee at court-houses and kachahris.

5. The matter of translations is that which next demands attention, and it is by no means so simple. The difficulties of translating the technical wording of our Bills into oriental languages, and especially into such of those languages as are so rude and meagre as to require to be supplemented from the Arabic or Sanskrit, are on all hands admitted to be very great. Whether these difficulties are at present overcome to the full extent to which it is practicable to overcome them the Government of India is not in a position to say. It is alleged by recent critics that they are not, and the point is one which must be enquired into; but, however this may be, the Governor-General in Council desires that no pains may be spared to make these translations as perfect as the difficulties of the case will permit.

The matter is one which, in the case of most of the languages into which translations are made, must be dealt with directly by the local Government; and I am to request that full information may be furnished to the Government of India as to the languages into which Bills, Statements of Objects and Reasons, and Reports of Select Committees are translated in the territories administered by His Honor, as to the nature and cost of the agency by which the work is done, as to the means adopted for testing the accuracy of the work, and as to the quality of the work, and the measures which may be suggested for improving its quality and for ensuring an earlier publication of the translations.

6. As regards translations into Urdu, it has been suggested that it might be advantageous to have translations

into that language prepared in the Translating Branch of this Department for distribution to all those parts of British India in which that language is understood. It has been said that, in most parts of the country where the people do not speak any form of Urdu, educated persons are generally able to read Urdu or understand it so as to be able to read it in a transliterated version. If this is the case, and if local Governments are of opinion that it would be an advantage to have at least one translation available which would be understood by a considerable number of intelligent persons in each province, and which might be relied on as being as good as the ablest translators could make it, the Government of India would be prepared to make such arrangements in the Translating Branch of this Department as might be necessary to admit of Urdu translations of Bills, Statements of Objects and Reasons, and Reports being prepared here for distribution throughout British India. I am accordingly to solicit an expression of opinion on this matter.

7. Assuming the Statement of Objects and Reasons to have been prepared in the manner above indicated, and proper translations of it, and of the Bill, and of any other document it may be desirable to circulate with them, to have been made, the next question that presents itself is that as to the mode in which those documents are to be brought to the notice of the persons whose opinions it is desired to elicit. I have already said that it is the intention of the Government of India to have copies of the English versions prepared here for sale at a low price to the public, and for gratuitous distribution in certain quarters. The same thing will have to be done by the

local Governments in regard to the translations prepared under their orders; but it remains to be considered to what persons or public bodies these documents, as well as the English versions prepared here, should be distributed gratuitously, and what means should be taken to render them readily available for purchase by the public generally. This matter is one to be dealt with by the local Governments, and I am to request that you will state what steps are at present taken by His Honor in regard to such distribution and sale, and what additional steps it is proposed to take in order to further the object in view; as for example, by submitting copies of the Bills and the papers connected with them to meetings of persons interested in them or otherwise.

8. I have already intimated that the Governor-General in Council attaches the greatest importance to the co-operation of the Press in this important work, and it has been determined that the comments of the Press, English and Vernacular, shall be more closely watched here than they have heretofore been, and that in some cases abstracts of, and in others full extracts from, newspaper articles shall be circulated to members of the Legislative Council in the same way as regular official communications now are circulated. I am accordingly to request that particular attention may be paid to the matter of distributing copies of Bills and the documents connected with them gratuitously to the Press, and that the Government of India may be informed as to what papers, both English and Vernacular, in your Province are of sufficient importance to make it desirable that they should be supplied with copies.

9. It will be remembered, in connection with this portion of the subject, that exception has been taken to the present procedure of the Legislative Council on the ground that, under that procedure, sufficient time for forming opinions is not allowed, especially to those who are dependent on translations which cannot be brought out for some time after the publication of a Bill; and it has been suggested that a rule of business should be framed which would preclude the Select Committee to which all Bills of any importance are referred from reporting on a Bill until a specified period has elapsed from the date of its publication in the Vernacular languages. Any such hard-and-fast rule would, in the opinion of the Governor-General in Council, be altogether unworkable. The time to be allowed in each instance must depend upon all the circumstances of the case; but with a view to imposing a check upon over-haste, it has been determined to make a rule of business to the effect that, when publication in the vernacular has been ordered by the Council (as it always is in the case of any Bill in which the people are interested), the Select Committee shall in their report state the date on which the Bill has been published in each language. The result of this will be that if in any case the Committee propose to proceed with a Bill before any particular section of the community has been allowed the time to form its opinion which would ordinarily be considered sufficient, the fact will be brought prominently to notice, and some special grounds of urgency will have to be adduced in support of the course proposed.

10. With respect to the republishing of Bills as amended in Select Committee, it appears to the Governor-General in Council that, as a rule, it is only the first or principal Report of a Select Committee that should be published. It would be impossible to go on republishing every time a Bill was amended during its passage through the Legislative Council. Such a process would indefinitely postpone the final passing of Bills, or would prevent very useful changes, such as are constantly suggested at a late stage of a measure, being introduced except at the cost of a delay which it might not be worth while to encounter. As regards republication in English, this matter seems to be adequately provided for by the rule of business which requires a Select Committee to report whether in their judgment the Bill has been so altered by them as to require republication.

11. As regards republication in the vernacular languages, it should be stated that, though the rules of business contain no express provision on the point, the more important Bills are at present republished in vernacular as well as in English. The question is whether this practice should not be extended.

The Governor-General in Council considers that, as a rule, when a Bill is of such a nature that the Council thinks it necessary to order it on its introduction to be published in the vernacular, and the Select Committee thinks it has been so altered as to require republication, there should be a republication in the vernacular languages as well as in English. But this, I am to observe, is not always so. It occasionally happens that the alterations in a Bill which

lead the Committee to recommend its republication are alterations merely in drafting or in matters of procedure, and that republication is recommended, not because the interests of any persons concerned are supposed to be affected, but simply because, owing to the complication of the subject, or to the danger of there being some flaw which would cause a hitch in the working of the Bill as amended, it is thought desirable to submit it once more to the judgment of experts. In a case of this sort a republication in English is obviously all that is required.

This being so, it appears to the Governor-General in Council that it would be impracticable to lay down any hard-and-fast rules, and that the requirements of the case will be best met by adding to the present rules of business a provision to the effect that, when the Committee recommend the republication of a Bill originally published in a vernacular language, the republication shall, as a rule, take place in the vernacular as well as in English, and that if in any case the Committee do not consider republication in the vernacular to be necessary they shall give their reasons for that opinion in their Report. When an amended Bill with its accompanying Report is to be republished in the vernacular languages, the Report, it need hardly be said, will be drawn up in the full and popular style which is to be adopted in the Statement of Objects and Reasons; and the publication, translation and distribution, and the time to be allowed for the formation and communication of opinions, will be governed by the same rules as in the case of an original Bill.

12. In conclusion, I am to inform you that this letter will be published in the *Gazette of India* and com-

municated to the Press with a view to eliciting suggestions; and I am to request that it may be published also in the local Gazette, and communicated to such public bodies and leading members of the native community as may be expected to give intelligent opinions on the points to which it refers.

I am to request that your reply to this letter may be sent at an early date.

From Chamber to Government of Bengal.

Calcutta, 9th November 1882.

The Committee of the Chamber of Commerce direct me to acknowledge the receipt of your letter No. 846 J. D. of the 9th of last month, with an expression of their regret that the intervention of the Doorga Puja holidays prevented an earlier submission of their views on the subject of your reference.

The Committee have read with much interest the communication from the Government of India on the question of giving greater publicity to measures under the consideration of the Legislature, and they desire to express their appreciation of the reasons which have prompted His Excellency the Governor-General in Council to propose the amendments of the existing procedure, and of the means which it is suggested should be adopted with the view to obtain the fullest discussion and information.

The object in view being to secure the greatest possible publicity of all measures before the Legislative Council and their freest criticism on the part of the public at large, the

Committee are of opinion that the most effective way of accomplishing such a purpose is that indicated by the Governor-General in Council in the 4th paragraph of His Excellency's letter.

The first change in the existing practice which is contemplated by the Government of India is the publication of a fuller and more popular statement of the Objects and Reasons of each Bill; and this is the step which appears to the Committee of the Chamber as the most likely to be really effective. In addition to it, the practice of giving precise interpretations of specified clauses and sections might be usefully introduced, for it is not infrequently found that the wording of a section imposes on the community a law which was in reality outside of the wish and intention of the Legislature at the time of the Bill being passed. Instances of this nature may be found in the License Act of Bengal, 2 of 1880, in the Petroleum Act, in the Inland Emigration Act of 1881.

The plan heretofore in use of publishing draft bills in the *Gazettes*, in the vernacular or otherwise, is no doubt very direct, and has no exact parallel in English practice ; but in the absence of a lucid and comprehensive statement of Objects and Reasons it is far from being effective, and falls very short of that practical and crucial examination by the Press, and by the many representatives of those interested, of all Bills of whatever sort or kind introduced into Parliament, which is the outcome of long custom and practice in England.

So far as relates to matters in which the European commercial community are interested, the Committee of the

Chamber think that a full but at the same time precise statement of the Objects and Reasons of the proposed Bills, together with more detailed explanation of the force and effect of specified clauses and sections would meet the requirements of the present time, and would enable such individuals as may be interested to recognise and comprehend the laws and regulations which were from time to time being prepared for the public at large. In this manner the Committee hope that not only may the risk of hasty legislation be diminished, but also that of hasty amendments being passed or proposed just when the public are becoming accustomed to a new law.

THE IMPERIAL LICENSE TAX.

The Committee have not dealt directly with this well-worn subject, as no especial appeal to them has been made during the half-year by any of the Chambers. The arguments put forward by the Madras Chamber in their address to the Finance Minister are fully appreciated. Still, indirect taxation in some form is, it is to be feared, a necessity in this country; and the Committee would prefer to endeavour to deal with separate cases of hardship or injustice as they occur rather than to attack the Act in general arguments which have often been used and as often been rejected by the Government.

From Madras Chamber to Chamber.

Madras, 5th April 1882.

I have the honor to hand, for the information of your Chamber the accompanying copy of a letter addressed to-day by this Chamber to the Finance Minister on the subject of the continuance of the Imperial License Tax.

I am to add by desire of this Chamber that it is hoped, the remonstrance will be supported by an expression of the views of your own Chamber.

From Madras Chamber to Finance Minister.

Madras, 5th April 1882.

In your Financial Statement, 1882-83, you are reported to have said with reference to the Imperial License Tax, that "the justice of imposing some tax upon the trading classes of the community cannot be questioned . . . The fact that those classes, who, perhaps, more than any others have benefited by British rule in India, pay so little, has long been recognised as a blot upon the Indian fiscal system."

I am desired by the Chamber to do myself the honor of communicating their respectful dissent to the inference that the trading classes have hitherto escaped their fair share of the burden of taxation. It seems to be assumed that because the trade of the country has attained great proportions, it necessarily follows that those who are actively engaged in its benefit more largely than other

classes from the rule which renders such trade possible, and are therefore better able to pay direct taxes. The argument overlooks the fact that the European official class in this country is remunerated on a scale which has no parallel in any other part of the world. The Chamber consider that whether an Englishman leaves his native land to become an official or a merchant in India, he does so primarily with a view to gaining a livelihood. The large salaries that tempt Englishmen to enter the public service of this country, ought not, in fairness, to carry with them an exemption from liability to taxation. Yet the aim of recent legislation has been to free the official class referred to from taxation, and to maintain a burden on the trading classes generally for no better reason than that they are assumed to be exceptionally affluent. It seems to be sometimes forgotten that the trading classes in innumerable ways confer great benefits on the country, and that if they had not been as energetic and enterprising as they have been, the means for the very liberal payment of the official class might have been wanting. The Chamber do not challenge the assertion that it is just to impose some tax upon the trading classes. But they demur to the conclusion that while it is just to tax these classes, it is also just to exempt professional men and officials, some of whom are in receipt of incomes that, in these days of fine margins, most merchants may well envy. In England, where trade is regarded as the backbone of the country, it has been the laudable ambition of modern financiers to relieve from taxation those who promote the prosperity of the country by means of trade.

The exemption of the professional and official classes from the Imperial License Tax was so contrary to justice and so repugnant to the practice that obtains in England with regard to the Income Tax—a practice sanctioned by the Queen's voluntary payment of taxes—that it was condemned in Parliament by the present Prime Minister and by public opinion at large. The Chamber regret, therefore, that the Government of India have again declined to seize a favorable opportunity for removing an anomaly in their fiscal system which is inequitable and inconsistent. They have frequently expressed their views on the License Tax, and they would not do so again were it not that they are reluctant to let their silence be regarded as assent to the argument you have employed in defence of the retention of the impost. You admit that "there can be no doubt that the present License Tax is open to serious objections." You remark that "not only are there great inequalities in its incidence in various Provinces, but also it is open to the very great objections that, in respect to those classes who are taxed, it falls with disproportionate hardship on the less wealthy, and further that other classes, who might with justice be called upon to pay the tax, are altogether exempted." And yet, although the License Tax "in its present form cannot be incorporated into the permanent fiscal system of the country," and although the Government "fully recognise the validity of the objections which may be urged against the tax as it now exists," they "do not propose that any changes should be made at present." The Chamber could not desire a more emphatic condem-

nation of the tax than is afforded by your own words, and they are disappointed at finding that the occasion offered by the command of a large surplus has not been, first of all, employed in removing a blot in their fiscal system that the Government of India cannot justify, and that Her Majesty's Government have never approved.

Your predecessor practically admitted the injustice of the tax, when, in December 1879, he introduced a Bill to substitute a comprehensive Imperial for the several local License Tax Acts. He then said that "every local Government in India has now concurred with the Supreme Government in the opinion that taxation similar in amount to that already borne by the wealthier classes of traders should be extended to the wealthier classes of officials." But on second thoughts the proposed Bill was abandoned, and in March 1880 he denied that is was desirable to impose the License Tax on officials and professional men "merely for the purpose of making our system of taxation more theoretically equal, and removing to some extent the reproach which undoubtedly is true, that certain classes do not at present bear their full share of the public burdens." Two years have passed since this singular extenuation of a palpable blunder in statesmanship was offered to the public, and there is yet no sign that the blunder will soon be remedied.

The trading classes of Madras have peculiarly good reason to know that the inequality of the incidence of

the tax is not its least objectionable feature. On the 28th December 1877 your predecessor, speaking at a meeting of the Viceregal Legislative Council, said :— "The highest amount which under any circumstances any individual or Company can ever be called upon to pay annually will be Rs. 200. The lowest fee of all is Re. 1. These will be the maximum and minimum rates in every Province, but the detail of classification will necessarily vary." Yet, in the following March, the Madras Government placed the maximum tax at Rs. 800 in this Presidency, although in Bengal the maximum was fixed at Rs. 500, and in Bombay at Rs. 200. The minimum tax was fixed at Rs. 4 in Madras, Re. 1 in Bengal, and Rs. 2 in Bombay. The Chamber remonstrated, but were met by the argument of your predecessor, that as a large trade in grain had been created in Madras by the famine which had rendered a License Tax necessary, those who had engaged in that trade must have made such unusually large profits as to admit of their paying the sums demanded. It was in vain that the Chamber endeavoured to show that the trade in grain had not been monopolised by Madras merchants, but had been largely shared in by people in Bengal and Burmah, and that as the famine had temporarily checked, if not stopped, other branches of commerce, the general result of trading opperations was not as satisfactory to the classes concerned as in ordinary years. At length, in 1880, the local maximum was reduced to Rs. 500 and at this moment the Madras, like the Calcutta, merchant pays a License Tax of Rs. 500 per annum, while the Bombay merchant continues to be let off with

the payment of Rs. 200. The Chamber may assume that the Bombay merchant is at least as well able as the Madras merchant to pay Rs. 500 as License Tax, but the anomaly involved in the existing schedules remains.

It is observed, that you hold out no promise of the tax being abandoned at the end of the present financial year, and the Chamber cannot but apprehend that if the small surplus that will remain after the remission of taxation which has been announced takes effect, should prove insufficient to provide for unexpected contingencies the tax will be continued for an indefinite period. The Governor of Madras said in a recent speech, that he could not defend the tax, and that he could not "deny that a more scientific direct tax might easily be devised." The tax is acknowledged in all quarters to be indefensible, yet the Government consider it desirable to continue it in its present form, "objectionable though it be, at all events, until the experience of another year has enabled us to judge more thoroughly than is at present possible of the policy which should in the future be adopted in respect to this tax." It seems to the Chamber a hardship to the classes affected by it that a tax which is wrong in principle, and vicious in incidence, and which has already been four years in existence, should be continued for an indefinite period, chiefly because the executive need more time to devote to its consideration. If the executive had had the advantage of personal experience of the inconvenience

or invidiousness of the tax, their final decision on the subject would most probably have been accelerated.

I have the honor to be,
Sir,
Your most obedient Servant,
(Signed) CLEMENT SIMPSON,
Chairman.

From Chamber to Madras Chamber.

Calcutta, 31st May 1882.

On the 28th of last month I acknowledged the receipt of your letter of the 5th, and promised to send you a reply as soon as the Committee for the current year had been appointed.

I am now directed to inform you that the representation which has been submitted by your Chamber to the Financial Member of the Governor-General's Council with reference to the Imperial License Tax has had the attentive consideration of the Committee, who desire me to assure you that they cordially appreciate all that has been advanced in your forcible remonstrance against the inequitable and inconsistent means adopted to supplement the Imperial Revenue.

That your objections to the License Tax are shared by the merchants of Calcutta will be seem from the accompanying copy of a letter * which was addressed by this Chamber to the Government of India shortly before the Budget for the current year was brought for-

---

* *Published in the Chamber's last report.*

ward; and an opportunity was taken to point out that the exceptional incidence of the tax, the injustice of existing distinctions, and the relatively heavy burden borne by the poorer classes, were as keenly felt as ever by all who are subject to its imposition.

But while my Committee sympathise with your own in all material respects, and would gladly support the movement you have made, it appears to them that having so recently addressed the Government on the subject, it would at present be inopportune to re-open the question of abandoning a tax the proceeds from which have been included in the estimated income of the current year.

ASSESSMENT UNDER THE LICENSE ACT.

The following reference to the Government of Bengal relative to the correct assessment under the License Act of a sole partner in a business in Calcutta, but trading in other districts in Bengal under different names and styles with other partners, has resulted in an authoritative ruling, under which each firm is separately assessable in respect of its own profits.

From Chamber to Government of Bengal.

Calcutta, 17th August 1882.

The Committee of the Chamber of Commerce have been requested to obtain a decision from the Govern-

ment of Bengal upon a License Tax case which has arisen under the present Act, and in submitting it for consideration, the Committee trust it may be convenient to favor them with an expression of the opinion applied for.

"A is trading in Calcutta under the name and style of A. & Co., he is the sole partner in the business, the profits of which cause him to be assessed under the highest class, and he pays tax accordingly.

"He is also trading in other districts in Bengal under the name and style of A. B. & Co. and A. C. & Co. B. & C. are managers of the respective firms, and are partners in those firms. Here again the profits amount to the highest class of tax. All three firms are assessed separately, but A. contends that his payment in Calcutta covers all his business, and that he is not further liable: that if A. B. & Co. and A. C. & Co. are to be taxed, they should be so upon the proportion of B. & C's interest only, and that A's share should not be taxed again and again. The Act clearly says that the highest payment by an individual is Rs. 500; but as A's interest in A. B. & Co. and in A. C. & Co. is 12 annas in each firm, his payments under the assessments amount to Rs. 500 for A. & Co; $\frac{3}{4}$ of Rs. 500, say—375 his share of A. B. & Co., $\frac{3}{4}$ of Rs. 500, say—375 his share of A. C. & Co., and so on. Is this a correct assessment under the Act"?

From Government of Bengal to Chamber.

No. 1868 *T. F., the* 28*th September* 1882.

I am directed to acknowledge the receipt of your letter dated the 17th ultimo, in which you enquire whether a person who, as sole partner of one firm, or as a partner with others in several firms, has paid singly or in the aggregate, license-tax amounting to Rs. 500, is liable to pay any further assessment in respect of his share in some other business.

2. In reply, I am desired to say that, as will appear from a reference to section 14 of the Act, and to Rule 3 of the rules passed by Government under section 32, a "firm" is a "person" within the meaning of the License Act. The assessment of a firm is accordingly made on the firm as on one person. The license is granted in the name of the firm, and the question of the liability of any particular partner in the business does not arise. It is evident that any other view of the law would lead to much confusion and inequality in assessments. For, if it be held that each partner should be dealt with separately, the result would be that the partners of a firm between them would frequently have to pay considerably more than a full single assessment of Rs. 500; while, in other cases, it might possibly happen that a large Company, the shares in which are distributed among a number of small holders, would escape unassessed.

3. If then, in the case of a firm, the firm itself be taken as the unit of assessment, each of the three firms

mentioned in your letter is separately assessable in respect of its own profits, as will be seen from the notification, dated the 30th June 1881, the partners in each case not being the same. The question of A's separate liability does not arise, as the license in each case is given in the name of the firm, and so long as it is admitted that the three firms are not branches of one and the same firm, the Revenue authorities are not concerned to know who the persons composing each firm are, or what share of the assessment in each case is debited in the firm's books to each in dividual partner.

THE INSUFFICIENCY OF PILOT BRIGS AT THE SANDHEADS.

The following correspondence resulted from the several complaints in the newspapers as to the inefficiency of the pilot arrangements at the Sandheads. The letter from the Master of the *St. Mildred* would appear to argue the absolute necessity for a thorough reorganisation of the arrangements for supplying incoming vessels with pilots, and the Committee would be glad to hear that the subject was receiving the attention of the Bengal Government. There seems no valid reason why a vessel arriving at the Sandheads should not be certain of obtaining a pilot immediately, whether during the day or night; and if the present brigs are unable

to safely put pilots on board incoming vessels in all ordinary monsoon weather steam vessels should be substituted for them. The Committee regret that the Government do not yet see their way to adopt the Chamber's recommendation that the pilot service, like the harbour-master's department, should be placed under the orders of the Port Commissioners.

From Chamber to Government of Bengal.

Calcutta, 15*th June* 1882.

The attention of the Committee of the Chamber of Commerce has been directed, by anonymous statements in the *Englishman* and the *Indian Daily News* of this day, to the alleged insufficiency of pilot vessels, and that at the present moment there is only one brig on the pilot station to meet the necessities of shipping bound to and proceeding from this port.

If the statements referred to contain any degree of information which can be relied on, the Committee of the Chamber trust that His Honor the Lieutenant-Governor will be pleased to give the matter his earliest attention; for it is essential that every precaution should forthwith be taken to avert any possible casualty, especially at this season when such precaution is of urgent need.

If any thing happened to the single vessel doing duty, it might be days before any information reached Calcutta,

and in the meantime ships arriving at the Sandheads would be in serious difficulty and even in danger. The present arrangements of the Marine Department would appear to be exceptional in regard to a proper complement of pilot vessels; and the circumstances which point to a deficiency of means for promptly meeting the requirements of vessels arriving at the Sandheads and of those proceeding to sea will no doubt engage His Honor's consideration as to the best mode of dealing with the serious difficulty which, it is represented, now exists.

From Government of Bengal to Chamber.

No. 158 *T—G. dated Darjeeling,* 23*rd June* 1882.

I am directed to acknowledge the receipt of your letter, dated the 15th June 1882, regarding the alleged insufficiency of pilot vessels in the Hooghly River.

Until recently there were three brigs at the disposal of the Bengal Government, of which two were always at the Sandheads, and one in town; but in May last the *Chinsurah* was condemned, subject to the alternative of an extensive repair which would occupy six months' and as a new brig is expected from England within that time, the idea of repairing the *Chinsurah* has been abandoned. Towards the close of May the *Coleroon's* cruize of four months expired, and she came to Calcutta to receive water and provisions, to make good defects that might have occurred during the cruize, and to ship a new crew. She was to have left for the Sandheads yesterday the 22nd, and on her arrival there would be as usual two brigs on the station.

133022

It has been ascertained from the Port Officer that, except on the 12th, 13th and 14th instant when ships that had pilots even could not enter the river owing to the bad weather which prevailed, there has been no delay in supplying incoming vessels with pilots. The Lieutenant-Governor, however, fully recognizes the importance of the matter to which the Chamber of Commerce refers.

From the Government of Bengal to the Vice-Chairman of the Port Commissioners, Calcutta.

No. 187 *T—G. The* 30*th June* 1882.

A report has been received from the Port Officer to the effect that the Pilot Brig *Cassandra*, which has come to Calcutta for repairs, will not be ready for duty in less than three weeks' time. Consequently, there is at present only one Pilot Brig on the station at the entrance to the Hooghly.

2. Until recently, three brigs were available for service, two of which were always at the Sandheads, and one in Calcutta. In May last the *Chinsurah*, one of the three brigs, was condemned, and a new vessel ordered from England.

Recently the *Coleroon*, one of the two brigs on duty at the Sandheads, having had to come to Calcutta to make good certain defects, the Chamber of Commerce complained that one brig was not sufficient to supply the requirements of the port, and that inconvenience and danger to the shipping visiting it was therefore to be apprehended.

3. The pilot station having again been left with only one pilot brig, Messrs. Mackinnon, Mackenzie and Co.,

who represent large shipping interests, have made a representation similar to that previously made by the Chamber of Commerce. The Lieutenant-Governor thinks there is much reason in these complaints, and considers it very unsatisfactory that the pilot station should be served by only a single brig at this season of the year. In His Honor's opinion it is essential that there should be two brigs on the station during the south-west monsoon. The very fact of repairs to the *Cassandra* being necessary shows that any small accident may deprive the station altogether of a pilot vessel if only one vessel is maintained there.

4. I am therefore to enquire whether the Port Commissioners can suggest any suitable arrangement whereby to fill the *Cassandra's* place during her absence. A very early reply is requested.

No. 188T—G.

COPY forwarded to the Secretary to the Bengal Chamber of Commerce for information, in continuation of my letter No. 158T—G, dated the 23rd June 1882.

By order of the Lieutenant-Governor of Bengal,

A. P. MACDONNELL,

Off. Secretary to the Government of Bengal.

DARJEELING,

The 30th June 1882.

Telegram from Chamber to Govt. of Bengal.

Calcutta, 30th June 1882.

Committee of the Chamber learn that *Coleroon* is the only Pilot Brig at Sandheads: *Cassandra* in dock and not likely to be ready for month or six weeks. Committee therefore recommend hire of suitable vessel until *Cassandra* rejoins station or arrival of new brig from England.

From Chamber to Government of Bengal.

Calcutta, 20th July 1882.

In continuation of the Chamber's letter of 15th and telegram of the 30th of last month, relative to the insufficiency of pilot brigs at the Sandheads, I am instructed to forward for submission to the Honorable the Lieutenant-Governor the accompanying copies of letters from the Commander of the British ship *Saint Mildred,* and his Agents, Messrs. Turner, Morrison & Co., to the address of the Port Officer, relative to the detention of that vessel at the Sandheads for no less than a week for want of a pilot, as well as to the position which the pilot brig took up, involving considerable risk to inward-bound vessels.

As this case amply illustrates the necessity which the Chamber has urged for the pilot station being adequately served, the Committee content themselves by placing it before His Honor without comment.

They will only further represent that the reported employment of the *Celerity* as a temporary substitute for

a pilot brig at this season of the year is an arrangement the utility and prudence of which are very much questioned, as that vessel is held to be totally unequal to such service; and the Committee regret that no more efficient vessel has been engaged.

The Committee venture to suggest that the pilot brig establishment requires a thorough investigation with the view to ascertain the perfect seaworthiness of the vessels in commission, and their capacity for the work they have to do.

P. S.—I am to add that Messrs. Turner, Morrison & Co. in forwarding the correspondence referred to, say—"We understand the *Ailsa* and *Hesperides* were also detained from the same cause for some days outside."

Calcutta, 18th July 1882.

ARTHUR STIFFE, ESQ.,

Port Officer of Calcutta.

DEAR SIR,

We beg to enclose a letter from Captain Murray of the ship "*Saint Mildred*," and shall feel obliged by your kindly forwarding same through the proper channels to the Government of Bengal for their information and report. We think you will agree with us that the delay is such that calls for prompt remedy, as it is monstrous to think that vessels should be kept for a week at the Sandheads in the South-west monsoon in heavy weather: and, further, that signals should be made calculated to decoy vessels into positions of difficulty and danger

as mentioned by Captain Murray, to say nothing of the loss of market sustained by the owners owing to the non-arrival of the ship.

Yours faithfully,

(Sd.) TURNER, MORRISON & Co.

P. S.—We may further state that after all the ship was not supplied with a pilot from the Brig, but got one from an outward bound ship!

(Sd.) T. M. & Co.,

TO THE PORT OFFICER, *Fort William.*

SIR,—I wish to bring to your notice the fact that I have been delayed no less than seven days at Sandheads in consequence of a want of pilots on the Station.

During that period I communicated frequently with the brig, in most cases off the Station, and invariably getting the same reply, coupled with the advice to work to windward, while at night I found him on several occasions, showing signals calculated to decoy vessels into positions of difficulty and danger.

I wish in particular, to report that on the 13th instant the brig took up a position of some danger in the western channel, thereby occasioning considerable risk to inward bound vessels; and for my own part, while endeavouring to approach him, in answer to his signals and flare up, I found myself in less than seven fathoms water with a strong tide, and not sufficient wind to manœuvre a large vessel.

In conclusion, I would submit that one pilot vessel is totally inadequate to the duties of the Station, it being evident to all that for one vessel to receive pilots from the outward bound vessels and supply inward bound ones, and at the same time keep the Station, is nothing less than a pure impossibility.

I am, Sir,

Calcutta, July 17th 1882. Your obedient servant,

(Sd.) J. P. MURRAY,
Master, Ship St. Mildred.

From Government of Bengal to Chamber.

Marine, No. 1399. *Calcutta the 5th September* 1882.

In acknowledging the receipt of your letter dated the 20th ultimo, I am directed to state that the Lieutenant-Governor has caused an enquiry to be made into the circumstances under which the ship *Saint Mildred* was detained at the Sandheads for want of a pilot, and desires me now to communicate the result for the information of the Chamber.

2. It appears that the *Saint Mildred* first made signals to the *Coleroon* for a pilot on the 8th July, on which date no pilot was available, as no less than twenty ships had been supplied with pilots on that and the two previous days. The *Saint Mildred* then stood out to sea, and did not return to the station until the 12th July, when there was again a temporary absence of pilots. Had the master not taken this action, he could without difficulty have been supplied with a pilot on the 9th, 10, or 11th.

On the 13th, pilots were again available, but the *Saint Mildred* was then to leeward, and was unable to reach the brig, owing to strong easterly wind. On the 14th, the *Saint Mildred* appears to have obtained a pilot from an outward-bound ship. The demand for pilots at the Sandheads must necessarily fluctuate considerably; notwithstanding the endeavours made on the part of the Government to keep up a sufficient supply, it must occasionally happen, as it happened on the occasion in question, that the number of pilots actually at the Sandheads is insufficient to meet an unusual demand; and this is a state of things which no increase in the number of brigs could possibly remedy, without an increase in the strength of the pilot service, which it is neither necessary nor advisable to make. The temporary nature of the inconvenience is very evident from the fact that had the master of the *Saint Mildred* applied for a pilot on any of the three days during which he stood out to sea, one would at once have been put on board.

3. The statement made by the master of the *Saint Mildred* that on several occasions the pilot brig showed signals calculated to decoy vessels into positions of difficulty and danger seems to have been made under a total misapprehension of facts. It appears that no signals whatever were shown on board the brig, except the usual maroons burnt for the benefit alike of outward and inward bound vessels. It may perhaps be well to quote here the remarks made by the Commander of the *Coleroon* with regard to the danger to which the *Saint Mildred* was exposed: "The position," he writes, "in the Western Channel, or rather South Channel, was made dangerous

by the *Saint Mildred* not anchoring on the flood, as he at one time intended to do, but ran to the northward reducing sail, and then set sail again. This made a safe weatherly position into a very unsafe leeward one."

4. The Lieutenant-Governor concurs in the opinion of the Chamber that it is very desirable that there should, when possible, be two brigs at the Sandheads, in order that in case of an accident, or of one brig being driven off the station by stress of weather, the Sandheads may not be left entirely without pilots; and with a view to securing the presence of a second pilot vessel while one of the only two vessels available was in dock, Mr. Rivers Thompson recently ordered the *Celerity*, a Government steamer, to the Sandheads, and this vessel remained there until relieved by the *Cassandra*. As the Chamber are no doubt aware, a new brig has also been ordered from England. The general question, however, of the number of brigs which should be stationed at the Sandheads is entirely foreign to the present case, in which the complaint is not that the number of brigs but the supply of pilots was insufficent. That this should have been the case is a matter for regret; but, as already observed, the inconvenience to which the *Saint Mildred* was exposed for five days out of the six for which she was detained, was due less to the insufficiency of pilots than to the movements of the *Saint Mildred* herself.

5. The last paragraph of your letter, in which the Committee of the Chamber suggest "that the pilot brig establishment requires a thorough investigation, with the view to ascertain the perfect seaworthiness of the vessels

in commission, and their capacity for the work they have to do," would seem to indicate that the Committee are under some misapprehension as to the true state of the case. There were until recently three pilot brigs in commission—a number which admitted of two being present at the Sandheads, while the third was undergoing repairs or refitting. Unforeseen circumstances necessitated the *Chinsurah* being put out of commission earlier than had been expected, but there is every reason to believe that the other two brigs are in perfectly serviceable condition.

From Chamber to Government of Bengal.

Calcutta, 12th October 1882.

On receipt of your letter No. 1319 of the 5th ultimo, in reply to the Chamber's representation of the 20th of July, as to the insufficiency of pilots at the Sandheads, a copy of it was furnished to Messrs. Turner, Morrison and Co., Agents for the ship *Saint Mildred,* the detention of which vessel, as communicated by her commander, was referred to in the Chamber's letter by way of illustration of the matter submitted for the consideration of Government.

Messrs. Turner, Morrision and Co. have placed before the Chamber copy of Captain Murray's letter of 21st of September, in reply, hereto annexed, in which he states that the enquiry into the circumstances of his detention does not altogether represent the facts of the case ; and

as there is so much conflicting evidence on the points at issue, the Committee of the Chamber simply forward Captain Murray's letter for such further investigation as may be deemed necessary.

I am also directed to send for your information copy of letter from the Commander of the ship *Combermere* addressed to the Port Officer, by whom no doubt the circumstances of the case have been inquired into and reported upon.

In forwarding these references to the Chamber, Messrs. Turner, Morrison and Co., who at all times represent a very large number of vessels in this port, draw attention to the *Telegraph Gazette* of the 6th instant, which reported several vessels at the Sandheads waiting for pilots, and they point especially to the danger vessels run in being so detained at a critical time of the year when severe cyclonic weather is usually looked for, and inward-bound vessels require the prompt services of pilots for conducting them into safe anchorage.

The Committee of the Chamber feel sure that a subject of so much importance will not fail to receive at the hands of His Honor the Lieutenant-Governor all the attention that is due to it.

Calcutta, September 21*st*, 1882.

MESSRS. TURNER, MORRISON & CO.

GENTLEMEN,

Having been favored by you with a copy of a letter dated 5th September, from the Officiating Secretary to

the Government of Bengal to the Secretary to the Bengal Chamber of Commerce relative to the detention at Sandheads of the *Saint Mildred* under my command, I consider it my duty to point out to you that the letter in question does not fully represent the facts of the case.

In the first place, with reference to para 2, it is true, that I signalled for a pilot on the 8th July, but it is equally true that I first spoke the pilot brig on the evening of the 7th, and was given to understand I would not get a pilot until daylight. Although the night was clear, the wind was light and the water smooth, this questionable custom of not boarding ships during the night, even in fine weather, is peculiar to Calcutta, and would not be tolerated for a moment at any other port. On the morning of the 8th the brig signalled to me, "I have no pilot; work to windward." I did not "*then*" stand out to sea as the letter states; and the commander of the brig recommended preferring to keep his company, together with several other vessels likewise detained for want of pilots. On the 9th also I was on the station as laid down on the charts published by the Government of India, and where we are told the brigs are always to be found at this season, I "then" stood out to sea on the evening of the 9th, partly, because the weather was threatening, but principally because no pilots nor pilot brigs were on the station. On the 10th I was laying to in a gale in company with several other vessels, all of which, like myself, had been previously refused pilots. I must remark here, that at least one ship stood out at the same time having a Government pilot on board, who it may be presumed approved of

this action, though the Officiating Secretary apparently wishes to show that there was no occasion for such a step. I was in company with the brig on the night of the 11th and all the following day and night, when it is admitted no pilots were available. On the 13th I followed the brig at considerable risk into the western channel, where we had anchored, when I was again refused a pilot, although the Officiating Secretary says, that pilots were "again available" on that day. I was close to the brig at midnight still in the western channel, and although he was burning his maroons and flare up no attention was paid to my signals for a pilot. I then stood out to the station in company with the outward-bound ship *Allanshaw*, and on the morning of the 14th he made signals for a boat which I sent and brought his pilot on board, the pilot brig not being on the station.

In the second place, with reference to para 3, my statement, that the signals shown by the brig were calculated to decoy vessels into danger, was made under no misapprehension of facts. It is true, that only the usual signals are shown, but what makes them a dangerous decoy to inward-bound vessels, is when they are shown off the station in a place like the western channel, where the *Coleroon* undoubtedly was flying her flags and showing her flareup on the 13th. The commander says that I made a safe position into a very unsafe one by not anchoring on the flood and by running to the northward. This is only half the truth. I ran towards his vessel for the purpose of making out a signal he was then flying, and in the hope of getting a pilot from him, when he told me he had none. Being disappointed in my attempt

to secure a pilot, I signalled him the question—"shall I anchor," but got no reply. His statement that my not anchoring made my position dangerous is merely his opinion, and as he would not back it at the time with his advice it can scarcely be of any weight now.

Those best qualified to judge are of opinion that anchoring at Sandheads in the S.-W. Monsoon should only be resorted to when danger is imminent, as it generally ends in the loss of anchors, chains, &c., and frequently with heavy charges for steam here in addition.

Were the pilot brigs continually on the station ready to intercept incoming vessels all this risk and loss would be avoided, and therefore I think it is perfectly clear that I was justified in saying that showing such signals under the above circumstances is calculated to decoy vessels into positions of difficulty and danger.

The actual facts of the case, then, are briefly these, that of the six days I was detained at Sandheads, three (*viz.*, the 8th, 12th and 13th) were passed in close company with the brig. The 9th was spent in cruising all over the station in attempt to pick her up, and the two remaining days the 10th and 11th actually comprise the whole period of my absence from the station; and more than that, I was in company with the brig on the nights of the 7th, 8th, 11th, 12th and 13th when no attention was paid to my signals for a pilot. I have thus shown that the statement that the inconvenience to which the "*Saint Mildred*" was exposed, was due less

to the insufficiency of pilots than to the movements of "*Saint Mildred*" herself is entirely unsupported by facts.

I am sorry I was unable to express myself in fewer words, but I hope the facts here stated may still be worthy of the attention of all those desiring the better regulation of the pilot service.

I remain, Gentlemen,

Your obedient servant,

(Sd.) J. P. MURRAY, *Master*,

Ship "*Saint Mildred*."

DUES FOR THE BASSES AND MINICOY LIGHTS.

It is a matter for regret that advantage should be taken of the present low value of the rupee to propose an additional charge for vessels for the Basses Lights and to double the proposed rate for the new light on the Minicoy Island. From the position of these lights, it is assumed that they are worked and maintained from India, and, if so, the value of the rupee should not be considered; even if worked from Home, the Board of Trade would gain as much in sending out funds as they lose in receiving from India the collections made here. It has already been pointed out that owing to the large increase in the number of vessels now trading in Indian waters, far larger collections

must be made than were estimated when the lights were first proposed, and it is hoped that no needless increase of charges on vessels will be permitted in these days of low freights resulting from the increase of vessels which is yielding the larger revenues referred to.

No. 380^{T}_{G}.

Copy forwarded to the Secretary to the Bengal Chamber of Commerce, with the request that the Lieutenant-Governor may be favoured with an early expression of the Chamber's opinion whether there is any objection to the levy of dues at 5 and 15 piés per ton respectively for the proposed light at Minicoy, and the Basses Lights.

By order of the Lieutenant-Governor of Bengal.

DARJEELING,
General Department,
Marine,
The 15th September 1882.

(Sd.) A. P. MACDONNELL,
Offg. Secy. to the Govt. of Bengal.

No. 3312.—*Simla the* 29*th August* 1882.

READ the following:—

Despatch from the Right Hon'ble the Secretary of State for India to the Government of India, No. 105 (Statistics and Commerce) dated 20th July 1882.

I forward herewith a copy of a correspondence with the Board of Trade * on matters connected with the site of the proposed Minicoy lighthouse, and the rate at which dues are to be levied on the shipping.

* From Board of Trade, 14th February 1882,
To " " 13th March "
From " " 21st " "
To " " 25th " "
To " " 7th July "
From " " 1st " "
(with sketch),
From " " 5th July "
To " " 19th " "

2. I request that such measures as may be necessary be taken with the least possible delay, and that the sanction of Your Excellency in Council to the grant of the site required by the Board of Trade, and to the collection of light dues at 5 pies per ton be intimated to me for communication to the Board.

3. You will observe from this correspondence that the Board of Trade are desirous that the collections for the Basses Lights may be made throughout India at the rate of 15 pies per ton, instead of at 1½*d.* as at present, the equivalent in English money at the rate of exchange annually fixed at this office being paid to the Board. Should you see no objection to the arrangement, I request that you will give instructions for the collections at that rate being made at Indian ports as soon as the necessary arrangements for the purpose can be carried into effect.

ENCLOSURE No. 1.

Letter from the Assistant Secretary, Harbour Department, Board of Trade, to the Under-Secretary of State for India, No. H.-1510, dated 14th February 1882.

With reference to recent correspondence on the subject of the erection of a lighthouse on the island of Minicoy, I am directed by the Board of Trade to forward a copy of a letter relative to the rate at which the dues payable for this proposed light, and the lights on the Great and Little Basses, shall in future be charged.

From this it will be seen that the Board of Trade propose that the dues shall be levied in India at a rate equivalent to ¼*d.* and 1¼*d.* per ton in sterling money, instead of, as at present, at an anna per ton.

I am now to request that you will move the Secretary of State to cause this Board to be informed whether he sees any objection to the course proposed.

ENCLOSURE No. 2.

Letter from the Under-Secretary of State for India, to the Assistant Secretary, Harbour Department, Board of Trade, No. F.-525, dated 13th March 1882.

I am directed by the Secretary of State for India in Council to acknowledge receipt of your letter of the 14th ultimo, H.-1510, intimating that in the Order in Council about to be obtained, a clause will be inserted to the effect that dues for the Basses Lights, and for the Minicoy Light, will be levied respectively "in India at a rate equivalent to 1¼*d.* and 1½*d.* a ton in sterling money," the rate of

exchange being that annually fixed between this Office and the Treasury.

In reply, I am directed to inform you that the Secretary of State in Council sees no objection, so far as this Office is concerned, to the proposal; but I am to point out that the arrangement would not seem to be a convenient one for ships, as instead of having a definite rate of pay in Indian currency, it will be a rate fluctuating with the exchange of each year, possibly involving very awkward fractions in the calculation, the rate to be paid on each ton being 24 pence divided by the value of a rupee at the official rate of exchange for the year.

If the Board of Trade see no objection, Lord Hartington would suggest that in the Order in Council about to be obtained the amount of dues to be collected shall, in the case of the Basses Lights, be 1½*d.* a ton in English, or 15 pies in Indian currency, and in the case of the Minicoy Light be ¼*d.* in English, or 2½ pies in Indian, currency. If this suggestion be adopted, payments of the collections remitted from India will be made to the Board at the amounts respectively of 1½*d.* and ¼*d.* a ton.

ENCLOSURE NO. 3.

Letter from the Assistant Secretary, Harbour Department, Board of Trade, to the Under-Secretary of State for India, No. H.-2462, dated 21st March 1882.

I am directed by the Board of Trade to acknowledge the receipt of your letter of the 13th instant, No. F.-525, suggesting, if this Board see no objection, that the dues

payable in respect of the Basses and Minicoy Lights should be fixed at 15 and 2½ pies per ton respectively instead of as proposed by this Board in their letter of the 14th February.

At the present rate of exchange these charges would, as pointed out in your letter, bring in the required amounts in sterling.

But as the rate of exchange varies, and as the object of the Board of Trade is to obtain the equivalent in sterling of the amount paid in currency, they are inclined to think that a general clause, charging the dues according to the rate of exchange annually fixed between the India Office and the Treasury, is preferable to making a fixed charge, which, if the value of the rupee materially alters, would require a fresh Order in Council before a change could be made in the amount of the toll.

I am to add that the Treasury and the Colonial Office have notified to this Board that they see no objection to the proposed charge.

ENCLOSURE No 4.

Letter from the Under-Secretary of State for India, to the Assistant Secretary, Harbour Department, Board of Trade, dated 25th March 1882.

I am directed by the Secretary of State for India in Council to acknowledge the receipt of your letter of the 21st instant, No. H.-2462, and to state, in reply, that, unless the rate of exchange should appear to be not only

materially, but apparently permanently, altered, it was not the wish of Lord Hartington that any fresh Order in Council should be procured. His intention was that the Board of Trade should be paid in this country the actual sum in sterling of 1½*d.* a ton for the Basses, and ¼*d.* at on for the Minicoy Lights, the collection of Indian money being at the rates of 15 pies a ton for the Basses Lights and 2½ pies a ton for the Minicoy Light.

If, with this explanation, however, the Board still adhere to their request that the dues for the Basses Lights and the Minicoy Light should, in the Order in Council about to be obtained, be fixed, for collection in India, at the rate of exchange annually fixed between this Office and the Treasury, Lord Hartington is prepared to acquiesce in that arrangement, and will inform the Government of India accordingly on learning the final decision.

ENCLOSURE No. 5.

Letter from the Under-Secretary of State for India, to the Assistant Secretary, Harbour Department, Board of Trade, dated 7th July 1882.

In continuation of my letter of the 16th instant, I am directed by the Secretary of State for India in Council to forward herewith a copy of a letter * received from the Government of India, notifying their consent to the erection of a lighthouse on the island of Minicoy.

* No. 23 (Separate Revenue) of 1882.

The consent of the Government of India to the imposition of dues will probably be considered to have been

sufficiently implied in the second paragraph of their letter of the 22nd October last, of which a copy was forwarded to the Board of Trade with my letter of the 19th of November 1881.

ENCLOSURE No. 6.

Letter from the Assistant Secretary, Harbour Department, Board of Trade, to the Under-Secretary of State for India, No. H.-5040, dated 1st July 1882.

I am directed by the Board of Trade to acknowledge the receipt of your letter of the 16th ultimo, No. R. S. and C. 1108, stating that the Government of India had been requested to signify, as early as possible, their consent to the erection of the new Lighthouse at Minicoy, and the levying of dues in respect of it.

I am to state that it now becomes necessary to acquire the site on this island at the position denoted on the plan at the south end.

I am accordingly to request that you will move the Secretary of State to sanction, or obtain the sanction of the Indian Government to the grant of a plot of two (hereafter probably to be increased to six) acres, with right of way to the sea on either side, liberty to construct a landing jetty in the lagoon, free use of sand and stones on the foreshore, and the right to remove any of the trees on Small-pox Island that may hereafter be found to hide the light from the sea, at an expense of Rs. 250, which, from the letter (copy of which is enclosed) of the Acting

Collector at Malabar, dated the 10th December last, to Mr. Matthews, appears to be the value fixed by the Madras Government.

Letter from G. McWalters, Esq., Acting Collector, Malabar, to T. Mathews, Esq., No. 4286, dated 10th December 1881.

With reference to Mr. Underwood's letter which you kindly brought over from Minicoy, and to our conversation this morning, I have the honour to inform you that any of the four sites for the Lighthouse at Minicoy selected by you can be procured for Rs. 250, with the following stipulations :—

(1) The extent not to exceed, say, two acres;

(2) With right of way to the sea on either side ;

(3) With liberty to construct a landing jetty in the lagoon, and

(4) With the free use of sand and stones on the foreshores.

2. The island is under the administration of the Madras Government, having been attached, with certain other islands, for arrears of revenue.

ENCLOSURE No. 7.

Letter from the Assistant Secretary, Harbour Department, Board of Trade, to the Under-Secretary of State for India, No. H.-4985, dated 5th July 1882.

Referring to Mr. Farrer's letter of the 5th ultimo, No. H.-4502, I am directed by the Board of Trade to state that, having regard to the possibility that the original estimate for the construction of the proposed lighthouse on the island of Minicoy will be exceeded, and to the consequent uncertainty as to the amounts that will be chargeable to revenue for repayment of the cost of its construction and for interest, they are of opinion that the toll to be levied in this country in respect of Minicoy should be fixed at one half-penny instead of one farthing per ton, as intimated in my letter of the 6th September 1881, No. H.-6106.

With regard to Lord Enfield's letter of the 25th March, No. F.-896, relative to the mode of collecting the Basses and Minicoy light dues in India, I am directed by the Board of Trade to state that they are willing that the tolls should be fixed in Indian currency at fifteen pies per ton for the Basses Lights, as proposed, and at five instead of two and a half pies per ton for Minicoy (taking one half-penny instead of one farthing per ton as the basis for the latter); but they think that the whole amount collected (less the usual commission of five per cent. for collection to be paid to the local officers for their services) should be remitted to them, as at present, at the rate of exchange fixed annually by the India Office.

I am accordingly to request that you will move the Secretary of State for India to obtain the consent of the Government of India to the imposition of dues at the rate of fifteen pies per ton for the Basses Lights, and five pies per ton for Minicoy Lighthouse.

The Board of Trade think the new rate for the Basses Lights should come into force as soon as possible, and the toll for Minicoy Lighthouse from the date of the exhibition of the light.

I am to add that, as the Board of Trade will be unable to obtain funds from the Public Works Loan Commissioners for the construction of Minicoy Lighthouse until they have the consent of the Government of India, both for the construction of the lighthouse and for the collection of the toll in respect of it, and as it is very desirable that steps for its erection should be taken without delay, the Board would be glad if the Secretary of State for India would procure the necessary consent at the earliest possible date.

ENCLOSURE No. 8.

Letter from the Under-Secretary of State for India, to the Assistant Secretary, Harbour Department, Board of Trade, dated 16th July 1884.

I am directed by the Secretary of State for India in Council to acknowledge the receipt of your letters, dated the 1st and 5th July, on matters connected with the proposed construction of a lighthouse on the Island of Minicoy, and, in reply, to state that a copy of those letters will be forwarded to the Government of India for their information and for such action as may be necessary, and that, on receipt of their reply, a further communication will be made to you.

The consent of the Government of India to the erection of the lighthouse was intimated to the Board of Trade in my letter of the 7th instant.

The Government of India will also be requested, if they see no objection, to give the necessary instructions for the collection of the Basses Light dues in Indian currency at the rate of 15 pies per ton, instead of 1½*d.* as heretofore. The new rate to come into force as soon as the required arrangements for its collection can be made.

Order.—Ordered, that copy of the foregoing despatch from the Secretary of State, and enclosures, be forwarded to the Government of Bombay / Government of Bengal / Chief Commissioner, British Burmah, with a request that it may be stated, for the information of the Government of India whether His Excellency the Governor of Bombay in Council / His Honour the Lieutenant-Governor / he sees any objection to the levy of dues at 5 and 15 pies per ton respectively for the proposed Light at Minicoy and the Basses Lights. The favour of an early reply requested.

R. E. HAMILTON,

Offg. Asst. Secy. to the Govt. of India.

From Chamber to the Government of Bengal.

Calcutta, 16th November 1882.

The Committee of the Chamber of Commerce have had under consideration the correspondence forwarded with your official No. 380 of 15th September, relative to the construction of the lighthouse on the Island of Minicoy and the collection of light dues therefor at 5 pies per ton, and the enhancement of the dues for the Basses Light from one anna to 15 pies per ton; and I am desired to submit the following reply.

In their letter dated the 3rd December 1872, the Committee of the Chamber stated in reply to Government of Bengal No. 3928, of the 12th of the preceding month, that a lighthouse on Minicoy would be of great advantage to the large and increasing trade through the Suez Canal, and expressed a hope that the recommendation of the Board of Trade would influence the early decision of the Government in placing a first-class light on the island.

The Committee are now glad to learn that the consent of the Government of India has at length been given, but they regard with much concern and regret the proposal for levying a rate which would appear to have been suggested by the Board of Trade on an extremely unsatisfactory ground, namely, that the original estimate for the construction of the lighthouse, which involved an estimated toll of one farthing per ton, might possibly be exceeded, and that the consequent uncertainty as to the amounts chargeable for repayment of construction and interest on the outlay rendered it necessary at once to raise the toll by 100 per cent. or to a half-penny per ton.

It appears to the Committee of the Chamber, and the mercantile firms whom they have consulted, that the recommendation of the Board of Trade in this respect rests on an unreasonable ground, and that, before owners of shipping are called upon to pay an additional tax, the charge should be based on actually ascertained expenditure, and not on a rough calculation of possibly exceeded estimates for construction and maintenance.

With regard to the proposal of the Board of Trade that the dues leviable in India shall be charged at rates equivalent to the rates in sterling money, I am instructed to say that the extreme inconvenience of adopting the Board's recommendation is clearly pointed out in the Secretary of State's reply of 13th March 1882, namely,—"that the arrangement would not seem to be a convenient one for ships, as, instead of having a definite rate of pay in Indian currency, it will be a rate fluctuating with the exchange of each year, possibly involving very awkward fractions in the calculation,"—and the Committee of the Chamber are of opinion that this fluctuation would undoubtedly be attended by great confusion with accounts, and lead to endless correspondence between agents in India and owners at home.

It is quite recognised that one anna is not now the equivalent of 1½*d.* sterling, but at the same time it is suggested that the proposed increase by 25 per cent. in the case of the Basses Light should be reconsidered; and the Committee of the Chamber respectfully urge that before such extra tax be imposed it should be clearly shown that the enhanced rate is absolutely necessary.

The effect of the increase would be felt as a serious addition to the already heavy burden on the shipping: to the British India Steam Navigation Company alone it would mean an additional annual payment of some 5,000 Rupees, and other Companies and owners would suffer relatively to the number and tonnage of their vessels.

The Committee believe that the cost of constructing the Basses Light came to about £62,000, and that the Light

was first exhibited not quite 10 years ago: and it may be safely assumed that the levy of one anna to cover 1½*d.* per ton was based on the amount of tonnage which it was ascertained, or estimated, would probably benefit by the Light. But in the interval the trade between India and the United Kingdom has been annually increasing, and the Committee find from the 43rd paragraph of the Port Commissioners' Administration Report for 1881-82, that while in 1873-74 the number of steamers from European ports to Calcutta, viâ the Suez Canal, was 118, aggregating 266,960 tons, in 1881-82 the numbers rose to 239 steamers aggregating 608,017 tons.

Leaving out of calculation all other vessels trading in the Eastern seas which may have had the advantage of the Basses Light, the foregoing figures fully illustrate the Committee's contention that the necessity for any enhancement of the rate now charged should be clearly established: indeed, they are inclined to the opinion that the accounts would probably exhibit the possibility of a reduction in the sterling charge rather than the necessity for an increase of the rate presently levied in India.

THE DOORGA POOJA HOLIDAYS.

It will be observed from the following representation from the Chamber, and the reply from the Government of India, that the Committee's latest endeavour to have the Doorga Pooja holidays restricted to those days only which are required for the religious observances of that Hin-

du festival has not been attended with the result which was desired by the mercantile community generally.

From Chamber to Government of India.

Calcutta, 23rd August 1882.

On the 15th of March last the Committee of the Chamber of Commerce submitted to His Excellency the Governor-General in Council a representation relative to the Durga Puja holidays, and they were informed, in reply, that their memorial had been forwarded to the Government of Bengal for consideration and report.

As the period at which these holidays usually take place is not far off, the Committee venture to bring the subject again to His Excellency's notice, as it is of importance to the commercial public, European and Native, to be advised of His Excellency's determination of the matter.

The Committee have already fully laid before the Governor-General in Council the reasons which impelled them to address His Excellency on a question which materially affects the business of this port: and they will therefore on this occasion only respectfully urge that His Excellency in Council will be pleased to take into consideration the very great inconvenience which attends the closing of public offices—especially the Currency Office—the Custom House only being partially kept open, during an exceptionally long vacation, and to grant the con-

cession applied by for restricting the holidays to those days only which are required for the religious observance of the Hindu festival.

From Government of India to Chamber.

No 3712, *Simla the* 12*th September* 1882.

In your letter dated 15th March last, you laid before the Government of India the views of the Bengal Chamber of Commerce regarding the injury and inconvenience caused to the commercial interests of Calcutta by the annual holidays in connection with the Hindu festival known as Durga Puja, which were stated to be of excessive duration. With reference to this question, you referred to the report of the Committee appointed by the Government of Bengal in 1879, in which it was recommended that, subject to certain limitations, only "the four days required for strictly religious purposes should be close holidays;" to the opinion expressed by the Lieutenant-Governor of Bengal, that it was inexpedient to make any change in existing arrangements; to the decision of the Government of India, dated 4th October 1879, accepting the recommendation of the Committee, and directing that "the public holidays on the occasion of the Durga Puja should be regulated accordingly;" and finally, to the orders of the Government of India, contained in a letter to the Government of Bengal, No. 452, dated 28th January 1880, in which, on further consideration of the inconvenience which would be entailed upon the Hindu community of Calcutta and other parts of Bengal by the

enforcement of the former decision, of the strength of the popular attachment to these holidays, and of the extent to which the complaints of the mercantile community could be obviated or mitigated by special arrangements, the Governor-General in Council directed that the observance of the Durga Puja holidays in the public offices in Calcutta should continue as heretofore.

2. The Chamber of Commerce represent, in your letter above quoted, that the religious holidays are not observed for more than four days; that a large number of the Native traders in the bazar are Marwari and up-country Hindus, who observe the Durga Puja festival on four or five days only; that the inconvenience of the enforced restriction of business due to the closing of the Government offices is as much felt by them as by the great majority of the European traders of Calcutta; and, in consideration of the fact that great and general inconvenience and serious loss are caused by the total closing of the Currency and other Government offices for the whole period of 12 days, and of the possibility of making arrangements by which the employés of Government effices could take leave in relays without stopping the work of the offices, they ask that the Durga Puja holidays should, in future, be restricted to the four close days which are alone observed as religious holidays.

3. In reply to your letter, I am directed to say that the grounds on which the Chamber of Commerce now base their arguments for the limitaion of the Durga Puja holidays to four or five days were fully considered by the Government of India before the decision contained in the

letter to the Government of Bengal, dated 28th January 1880, was passed. The Governor-General in Council is aware that the closing of the Government offices in Calcutta for a period of 12 days is productive of some inconvenience to the mercantile community; but, on the other hand, it cannot be overlooked that, in the words of the Lieutenant-Governor of Bengal, "the inconvenience and loss which the mercantile community suffer from the existing state of things, great and serious as they are, cannot be remedied without inflicting a still more serious hardship on a far more numerous, though less influential, portion of the community." The Government of India is bound to attach its proper weight to the strong attachment which the Hindu community of Calcutta manifest to these holidays, and to the serious hardship which any curtailment of them would inflict on a large class; and I am, therefore, to say that the Governor-General in Council regrets that the considerations now put forward by the Bengal Chamber of Commerce do not appear to him sufficient to justify any modification of the orders passed in January 1880, or the re-opening of a question which has already been decided after careful consideration in all its aspects.

WORK AT PUBLIC OFFICES DURING THE DOORGA POOJA HOLIDAYS.

In consequence of the decision arrived at as recorded in the preceding paragraph, the Comptroller-General was under the necessity of keeping the Currency Office entirely closed during the long

vacation, but he had arranged for the payment of Council Bills and Interest Drafts on the days when the Bank of Bengal was open for business.

From Chamber to Comptroller-General.

Calcutta, 8th September 1882.

I AM directed by the Committee of the Chamber of Commerce to forward for your information a copy of letter addressed by them to the Government of India on the 23rd ultimo, with reference to the Doorga Pooja holidays, also a copy of a telegram sent yesterday on the same subject.

The Committee have been informed by the Collector that the Custom House will be kept open for public business on the following days during the holidays, *viz* :—

Wednesday	...	...	18th October
Monday ..	...	...	23rd „
Tuesday ...	...	...	24th „
Wednesday	...	...	25th „
Saturday...	...	...	28th „

and they instruct me to represent that it is the general desire of the mercantile community, that concurrently with the above arrangement, the offices under your control and the Government Account Department at the Bank of Bengal should be kept open for public convenience.

From Comptroller-General to Chamber.

Calcutta, 9th September 1882.

I have the honor to acknowledge receipt of your letter of yesterday's date, regarding the observance of the Doorga Pooja holidays in the offices under my control and in the Government Account Department at the Bank of Bengal.

I have submitted the matter to the Government of India for orders.

From Chamber to Comptroller-General.

Calcutta, 18th September 1882.

Since writing to you on the 8th instant, regarding the observance of the Doorga Poojah holidays in the office under your control and in the Government Account Department at the Bank of Bengal, and receipt of your reply thereto of the following day, the Committee of the Chamber have received from the Government of India a reply to their letter of 15th March on the general subject of these holidays. In handing you a copy of it for your information, I am to observe that the reply makes no reference to the Chamber's application, by telegram of the 8th instant, for keeping the Currency and other offices open on the days on which the Custom House is kept open ; and as this special point has been submitted by you to the Government of India, and no reply has yet been received from you on the subject, the Committee are not without hope that the arrangement applied for may be conceded.

'The Committee have already advised you of the dates on which the Collector is prepared to keep the Custom House open for public business, and they desire me to say that the Bank of Bengal, in deference to the wishes of the mercantile community, has agreed to open on the same days, but it has at the same time pointed out that no transactions can be passed through the Government Account unless the Bank is specially authorised by you to do so.

From Comptroller-General to Chamber.

Calcutta, 30th September 1882.

In reply to your letter, dated 18th current, on the subject of the Doorga Poojah holidays, I have the honor to say that I have instructions from Government to arrange for the payment of Council Bills and Interest Drafts on the days when the Bank of Bengal is open for business.

The Currency Office will be entirely closed.

DUTIES LEVIED IN THE UNITED KINGDOM ON INDIAN TEA AND COFFEE.

In April last the Committee received a letter from the Madras Chamber of Commerce, requesting their co-operation in addressing the Secretary of State for India with the object of recommending the remission of duty on certain Indian products, but more especially on tea and coffee.

The only article that seriously affects this Presidency is tea, and the Committee entirely concur in the opinion expressed by the India Tea Association that it is undesirable to join in any representation on the subject, as the protection thus afforded to Indian tea would not be in accordance with the principles of free-trade.

From Madras Chamber to Chamber.

Madras, 5th April 1882.

It was resolved by this Chamber last week to invite your Chamber to consider the advisability of a joint representation being addressed by the Chambers of Commerce in India to the Secretary of State on the subject of the remission of import duties on British productions in India, and the continuance of import duty on Indian coffee, tea, and jewellery in England. Since then the news has been received that, on the 27th ulto., Lord Hartington, replying to a question in the House of Commons, remarked that the remission of cotton duties in India was no reason for the remission in England of duties upon Indian tea and coffee.

The anxiety that Her Majesty's Government have shewn to bring about the removal of import duties in India seems to this Chamber to offer a strange contrast to the indifference manifested regarding the burdens imposed upon Indian products in England. The remissions which India, without any choice of her own, has now made,

have to a great extent been made in disregard of the country's chronic want of revenue for the development of communication, the extension of irrigation, and the creation of famine protection works. The trade of Lancashire with this country has been benefited; but this country is compelled to dispense with the revenue that it legitimately derived from Lancashire products. India has had to think less of her own needs than of the demands and theories of England. On the other hand, England derives revenue by taxing Indian products, and, to be consistent, she should regard the collection of revenue as a secondary consideration to that of removing restraints on the commerce of her great dependency.

the princip les of free-trade are accepted, it must be assumed that the abolition of import duties will do more good to India than to any of the countries that send her their products. Yet England, who inspires and prompts the free-trade that now exists in India, in adhering to the duties that she levies on Indian productions, is acting in direct opposition to the doctrines that she inculcates when negotiating with India and with foreign countries for the free admission of her own goods. The Chamber contend that India having sacrificed her import duties in deference to the wishes of England, it is reasonable and politic that England should concede something to India. The coffee and tea of India are weighted with taxation in England to the amount of about 1½ million sterling per annum, and the abolition of this tax, or duty, would tend, like any stimulus giving to Indian exports, to lessen the loss that this country sustains by exchange.

The Chamber therefore trust that it will appear to your Chamber expedient to unite in such a respectful declaration to the Secretary of State as may assist in securing eventually for Indian products on their importation into England a freedom from taxation, such as English productions now enjoy in India.

From Chamber to Madras Chamber.

Calcutta, 19th June 1882.

I am now directed to reply to the letter, dated 5th of April last, which the Chairman of your Chamber was good enough to address to this Chamber as to the advisability of a joint representation by the Chambers in India to the Secretary of State regarding the continued levy of import duty in England on certain Indian products, now that the duty on British products has been remitted in India.

Tea being the most important—almost only—article of export from this Presidency on which import duty is levied in England, the Committee of this Chamber deemed it expedient to submit your Chairman's letter for the consideration of the Indian Tea Association as the body chiefly interested in the question; and the following is an extract from a communication received from them in reply:—

"The views of the Madras Chamber have been carefully considered so far as they affect the question of remission of duty on Indian Tea, and the Committee are unanimously of opinion that it is undesirable to join in

any representation to the Secretary of State on the subject.

" They have no hope that any representation would assist in having the duty removed from Indian Tea and maintained on China, for this would not be free-trade, but a manner of protecting Indian Tea at the expense of China."

The Committee of the Chamber having thus consulted those most interested, and in view of their unanimous opinion as above expressed—an opinion in which they generally concur—think it unadvisable to join in any agitation having for its object the abolition of English import duties on Indian products.

REGISTRATION OF NOTES UNDER 50 RUPEES.

The desirability of reverting to the recently abandoned system of recording at the Currency Office the names of persons presenting notes for Rs. 20 and under, has been influentially represented to your Committee, who regret, however, that they have not been able to convince the Government of the necessity for adopting measures for the protection of the public.

From Chamber to the Government of India.

Calcutta, 24th August 1882.

The circulation of forged Government Currency 20 Rupee Notes having occasioned much public alarm, and holders of Notes of that denomination being unable to satisfy themselves whether they are genuine or otherwise without presenting them promptly at the Currency Office for payment, the attention of the Committee of the Chamber of Commerce has been directed to the orders which were passed about this time last year to discontinue the practice of requiring or recording the names of persons presenting for payment Notes for 5, 10 and 20 Rupees, and of advertising notices of loss or claims for whole Notes of these values.

The reason for the alteration of that practice is understood to be that the public had, by common consent, abandoned all record of the receipt and payment of such Notes, and that, notwithstanding considerable trouble and expense incurred at the Currency Office in registering the particulars referred to, the system of record had been found of no avail in aiding the recovery of lost Notes.

The Committee of the Chamber regret the abandonment of a practice, which, notwithstanding the alleged want of success in helping claimants to recover losses, yet had the negative advantage of deterring the dishonest from dealing with Notes of small value; for, although their numbers were not generally kept, still the fact that notice of loss would be registered and advertised by the Currency Department, followed by the not improbable detection of

theft or other cause of loss, rendered dishonest or malicious dealing all the more difficult, and diminished temptation to crime.

The Committee understand that in declining to take any steps to advertise or enforce claims preferred for lost Notes of smaller values, the Currency Department gave as a reason that it is bound to pay to the bearer on presentation; but this objection would be equally applicable to Notes of higher values, for the same condition of payment to bearer on presentation attaches to all; and, consequently, if the order can be justified as regards the smaller Notes, so it could be as regards Notes of higher denominations.

But the Committee submit that there are ample reasons why the Notes of smaller values should be specially regarded, and the owners of them afforded all facilities for tracing lost property.

From the Report on the operations of the Currency Department for the year 1880-81, paragraph 5, the Committee find that out of 2,883,442 pieces of paper which formed the entire circulation, no less than 2,385,652, or upwards of 80 per cent. of the whole, were Notes of the lower values, *viz.*, 429,075 of fives, 1,425,995 of tens, and 530,582 of twenties.

In these denominations the increase over the two preceding years was considerable, whilst in the higher values—except for Notes for 10,000—there was either a comparatively small advance or an absolute decrease.

This being so, and as Notes of all denominations are legal tender, there appears to the Committee no just ground for excluding the smaller Notes from the protection and privilege which are accorded to the higher.

Indeed, the fact of the circulation consisting of so large a proportion of the former, and presumably in the hands of the poorer classes, would appear to present greater reason for protection and means for their recovery in case of loss.

Any measure likely to disturb or arrest the free circulation of Notes of smaller values is greatly to be deprecated; such currency rather needs all the encouragement that can be extended to it, and the Committee of the Chamber would gladly see the removal of any cause that may tend to depreciate it.

Taking into consideration the very large profit which the Currency system yields to Government—some 25 lakhs annually—it appears to the Committee of the Chamber that, although it may involve additional labour and expense, the system of record should be re-established in the interests of the public.

From Government of India to Chamber.

No. 4493, *Simla*, 20*th October* 1882.

I am directed to acknowledge receipt of your letter, dated 24th August 1882, suggesting, with reference to the recent forgery of twenty-rupee currency notes of the Calcutta Circle, that in the interests of the public the practice of recording at the Currency Offices the names of

persons presenting for exchange or encashment of currency notes for 5, 10 and 20 rupees, and of advertising notices of loss or claims for whole notes of these values, which was discontinued last year, should be re-established; and, in order to avoid the possibility of misapprehension, to point out, in the first instance, that there is no connection between the recent forgery of notes of Rs. 20 and the orders to which the Chamber refer. There has been no change in the practice of the Currency Offices in any point which affects the detection of a forged note or the possibility of tracing it back from person to person.

2. It is stated in your letter that "the Committee of the Chamber regret the abandonment of a practice which, notwithstanding the alleged want of success in helping claimants to recover losses, yet had the negative advantage of deterring the dishonest from dealing with notes of small value; for although their numbers were not generally kept, still the fact that notice of loss would be registered and advertised by the Currency Department, followed by the not improbable detection of theft or other cause of loss, rendered dishonest or malicious dealing all the more difficult, and diminished temptation to crime." With reference to this argument, I am to say, that the Government of India is not in possession of any evidence tending to show that registration and advertisement by the Currency Department of the loss of notes of small value facilitated the detection of theft or of the cause of loss, and thereby rendered dishonest dealing all the more difficult, and diminished temptation to crime. The

public have abandoned the attempt to register the numbers of such notes as they pass from hand to hand.

I have never once, in these last nine years, known of a single instance in which the investigation of crime has been facilitated by the stoppage of currency notes of denominations under Rs. 50.

The reason is that the public do not keep the numbers of such notes, which are consequently, when stolen, on no better footing than coins. In all serious crimes we do our best to trace back all stopped notes; but in the case of notes of Rs. 20, Rs. 10, Rs. 5, we have never been successful. Hence it would seem to matter little, from a police point of view, whether the thief exchanges such notes in the bazar or at the Currency Office. I do not believe that any dishonest person abstains from stealing small notes from the fear of subsequent detection.

In cases where small notes are stolen, unless the offence is a very serious one, we now always reply to a requisition for action by sending a notice in the enclosed form.

Until the public generally keep the numbers of small notes, there is, it seems to me, no use whatever in the Currency Office keeping them.

The less natives of this country are troubled in respect of currency notes, the better for the circulation.

The presenters of stolen notes at the Currency Office, after stoppage, were invariably *bonâ fide* holders; payment to them could not be refused, and the notes could never be traced back to the criminal, because the numbers of the notes were not registered by the public. With reference to this point, I am to refer you to the extract, quoted in the margin, from a letter from the Deputy Commissioner of Police, Calcutta, dated 4th August 1881, which affords the very strongest evidence of the existence of the view held by Government on the point.

3. The Committee of the Chamber also urge that the argument for declining to take any steps to advertise claims preferred to lost notes of small values founded on the consideration that Government is bound to pay the bearer on presentation would be equally applicable to notes of higher values, for the same condition of payment to bearer on presentation attaches to all;

and they observe that the fact of so large a proportion of the total circulation consisting of small notes, presumably in the hands of the poorer classes, appears to present greater reason for protection and means for their recovery in case of loss. The Governor-General in Council fully admits the force of these arguments, so far as they go; but he is confident that on reconsideration the Chamber will admit that they cannot influence the decision on the question at issue until it is shown that the system of record of names of presenters of notes of small value, and of advertisement of loss or theft was really of service in leading to the detection of crime; and of this, as before remarked, there is no evidence, so far as the Government of India are aware.

There has been no change of system as regards notes of the value of Rs. 50 each and upwards, simply because there exists a probability that notes of these values can, to some extent, be traced.

4. The Governor-General in Council agrees with the Chamber in thinking that any measure likely to disturb the free circulation of notes of the smaller values is greatly to be deprecated; it is probable, however, that any degree of confidence in these notes, which may have been due to the supposed likelihood of being able to trace them in case of theft or loss, was more than counterbalanced by the harassment by police investigation to which *bonâ fide* holders of such notes were liable under the system now abandoned; and it is certain that since the abolition of the system, which

the Chamber desires to see restored, there has been no falling off in the circulation of the smaller notes, but on the contrary an increase.

5. Under the circumstances above stated, I am to say that the Governor-General in Council regrets that he is unable to accede to the request made by the Chamber of Commerce.

SPOILED STAMPS ON BILLS OF EXCHANGE.

Clause (*c*) of Section 51 of the Indian Stamp Act requires that in cases where stamps impressed on Bills of Exchange have been spoiled or rendered useless through clerical errors, allowance shall be made, provided that another completed and duly stamped Bill of Exchange is produced identical in every particular with the spoiled bill, except in the correction of any omission or error. This omission or error frequently occurs in press of business, specially on a mail day, and the immediate production of a fresh set of bills, in substitution of the set on which the stamps have been rendered useless, with the formality of presentation to the Collector, &c., may be impossible at the time, and attended with great inconvenience to the merchant who has negotiated his bills and shipping documents for the outward mail.

The Board of Revenue recognise the hardship of such a case, and having inquired whether the inconvenience complained of was a real and general one, the Committee replied that they believed it was so, and that the difficulty in the way might be removed by authorising the admission, within a few days, of such evidence—a certificate by a Bank, for instance, or any other satisfactory proof—as shall enable the Collector to admit the application for allowance and to order payment on a date subsequent to that on which the stamps were rendered useless.

From Board of Revenue, L. P. to Chamber.

No. 1006 *B., dated Calcutta the* 9*th September* 1882.

It has been represented to Government by Messrs. Reinhold & Co., that some difficulty is experienced by them in complying with the requirements of section 51 (*c*) of the Indian Stamp Act I. of 1879, relating to the renewal of stamps affixed to Bills of Exchange which have been spoiled or rendered useless through clerical errors. The provisions of the clause to which exception has been taken are that allowance shall be made by the Collector for the impressed stamp used for any Bill of Exchange, &c., signed by the drawer thereof, but which from any omission or error has been spoiled or rendered useless, although the same . . . may have been presented for acceptance or accepted or endorsed . . . . . provided

that another completed and duly stamped Bill of Exchange . . . is produced identical in every particular except in the correction of such omission or error as aforesaid with the spoiled Bill . . . .

Messrs. Reinhold & Co. say that merchants are obliged to keep a large stock of stamped blank Bill of Exchange forms ready for use. and that when business is brisk and the work pressing, especially on a mail day, some clerical errors in writing or calculation may occur which are only detected at the Bank to which the bill with other documents is delivered. The Bank returns such Bills for the purpose of being replaced by a new set of bills, and a fresh set is furnished at once from the stock in hand. If the fresh set is kept back for the purpose of presenting it at the Collectorate, the chances are that the mail may be lost, and the contracts invalidated. Under these circumstances Messrs. Reinhold & Co. have requested that the provision of the clause above cited may not be actually enforced, that the Collector may be authorised to accept the Bank's certificate that the full set of Bills of Exchange has, in the ordinary course of business, been handed to it; or any other proof which may be required showing that there has been no loss to the Government revenue, or any intention of fraud, and that, if the Collector is satisfied on these points, an allowance for the spoiled stamps may be granted on a subsequent date.

There is, perhaps, no doubt that the existing clause (*c*) of section 51 of the Indian Stamp Act operates with hardship in the case referred to by Messrs. Reinhold & Co.; but before submitting any proposal for the consideration

and orders of Government, the Board desire me to request that you will be good enough to state, with the permission of the Chamber, whether the inconvenience complained of is a real and general one.

From Chamber to Board of Revenue.

Calcutta, 20th September 1882.

The Committee of the Chamber of Commerce direct me to acknowledge the receipt of your letter No. 1006 B. of the 9th instant, relative to the allowance for spoiled stamps under the Stamp Act No. 1 of 1879.

Your reference is based on a representation by Messrs. Reinhold &c., of the difficulty experienced in complying with the provision of the clause (*c*) of section 51, which requires that in the event of the impressed stamp used for any Bill of Exchange, &c., signed by the drawer thereof, being spoiled or rendered useless in consequence of any error or omission, another completed or duly stamped Bill of Exchange shall be produced identical in every particular with the spoiled bill, except in the correction of such error or omission, before allowance can be granted.

The inconvenience attending such requirement of the Act is fully illustrated in the manner submitted by Messrs. Reinhold & Co., and the admission by the Board of Revenue that the existing clause operated with hardship in the case referred to, leave no room for doubt as to the expediency of some rule being passed with the view of giving relief in all similar instances.

As the provisions of section 51 are "subject to such rules as may be made by the Governor-General in Council as to the evidence which the Collector may require," the Committee of the Chamber are of opinion that a simple remedy can be easily applied by a rule being made authorising the admission—within, say, 10 days exclusive of holidays—of evidence which shall satisfy the Collector and enable him to meet cases similar to that under consideration.

The Committee believe that the inconvenience complained of is a real and general one, and they hope the Board will adopt the course proposed in the closing paragraph of your letter.

THE USE OF POSTAGE STAMPS FOR RECEIPTS, &C.

The special difficulty which attends the introduction into this country of the use of postage stamps in place of the one anna receipt stamps which are at present employed on demand drafts and other documents, is clearly set forth in the Government Resolution which is printed below. Your Committee have given the subject their careful attention, and believe that the interests they represent would benefit in some measure if the proposed change were carried out.

From Chamber to Government of India.

Calcutta, 4th October 1882.

The Committee of the Chamber of Commerce desire me to acknowledge the receipt of Government of India Resolution No. 3481 of the 30th August 1882, relative to a proposal to authorise the use of postage stamps in payment of the one-anna stamp duty chargeable on instruments under the Indian Stamp Act of 1879.

The Committee have carefully considered this subject.

The objection to adopting the proposal of Government appears to lie in this,—that the practice of defacing postage stamps is very deep-rooted in this country, and it will be a long time before people in the rural districts can become aware of the prohibition except by the practical experience of having their defaced stamps treated as unstamped, and therefore liable to double the prepaid rate; and that loss, distrust of the Post Office, and possibly loss of revenue, may temporarily follow.

Nevertheless the Committee think that, on the whole, the community in the Presidency Towns, and larger Mofussil stations, will be generally inclined to accept the proposed change with favor.

No. 3481. *The 30th August* 1882.

Resolution.—By the Government of India, Department of Finance and Commerce.

Read the certain papers having reference to a proposal to authorise the use of postage stamps in payment of the one-anna stamp duty chargeable on instruments under the Indian Stamp Act, 1879 :

Resolution : It is provided by Act 44 Vic., Chap. 12, Section 47, that "any stamp duties of one-penny, which may be legally denoted by adhesive stamps not appropriated by any word or words on the face of them to any particular description of instrument, may be denoted by adhesive penny postage stamps.

2. Under this provision penny postage stamps are in the United Kingdom allowed to be used to denote stamp duties of one penny on any of the instruments named in the margin ; but several penny postage stamps cannot be used to denote the duty on an instrument liable to a higher rate of duty than one-penny. Nor can two half-penny postage stamps be used to denote the duty of one-penny. The Governor-General in Council has ascertained that the system has caused no inconvenience, but that on the contrary it has worked well, while the additional facilities afforded to the public have been much appreciated. It is also expected that the system will result in an increase of revenue.

Drafts, receipts, protests, letters of renunciation, policies (other than life policies), proxies, contract notes, delivery orders, certificates of births, deaths and marriages.

3. In this country a stamp duty of one anna is levied on most of the instruments enumerated above, and on a few others, and there can be little doubt that the adoption of a similar system in India would be a very great convenience to the public in the transaction of business,

particularly in the matter of receipts. Postage stamps can be obtained everywhere, and many people always keep a supply of them; while receipt stamps can only be procured from stamp vendors, and comparatively few people keep a stock of them. The adoption of the system referred to would, therefore, afford facilities to the public in denoting the stamp duty, and by rendering easier the observance of the law would doubtless increase the revenue.

4. The several local Governments have been consulted as to the expediency of adopting the system in India, and it appears that all of them approve generally of the proposal. The only objections raised are—

1*stly*, that it would be difficult to distinguish between postal earnings and the revenue from receipt and other stamps,—a distinction which it is of importance to preserve, both because of the essential difference in the nature of these receipts and because at present stamp revenue is provincial, while postal receipts are imperial;

2*ndly*, that the unified stamp, after being employed for stamping receipts, would be liable to be fraudulently reused in payment of postage.

The first objection can easily be removed. The amount of the revenue at present derived from one-anna revenue stamps can be readily ascertained, and, with such slight additions as may be requisite in view of the probable normal growth of the revenue from this source, might form the basis for adjustments between Imperial (Postal) and Provincial (Stamp) Revenues.

But the second objection seems to be of a more formidable nature. Against the possible re-use of the stamps after removal of the defacement, it would be necessary to provide by printing the unified stamps in doubly fugitive ink, so that any attempt to remove defacement would involve the destruction of the imprint. This precaution is considered absolutely necessary for the safety of the revenue in the United Kingdom, and would be at least equally necessary in India, while the extra cost will be but small. If this precaution were adopted, there would be little danger of a stamp which had been once used for payment of postage on a letter being employed a second time as a stamp under the Stamp Act, for the Postal Department defaces the stamp in such a manner as to render its fraudulent re-use practically impossible. The danger consists in the possibility of stamps which have once been used in payment of stamp duties being used a second time as postage stamps,—a danger which arises out of the existing practice, which has been encouraged by the Postal Department, under which senders of letters deface the stamps which they put upon their letters in order to prevent the stamps being removed either before the letters are posted, or while in transit through the Post Office.

5. Under Section II of the Indian Stamp Act, 1879, a person affixing any adhesive stamp to any instrument is obliged to cancel it, "so that it cannot be used again." He is not obliged to write his name on the stamp, as is the case under the English law. It would be inex-

pedient to alter the Indian law in such a manner as to bring it into conformity with the English law, as there must be a very large number of persons in India who use the one-anna revenue stamps and who are unable to write. Under these circumstances, it is obvious that if a letter were posted, the stamp on which had been defaced it would be impossible for the departmental officers to know whether the stamp in question was one which had been used as a stamp under the Stamp Act, or whether the defacement was merely due to the very general practice already alluded to. It is clear, therefore, that if the reform is to be introduced, the only course open is to prohibit the practice of defacing the postage stamps affixed to letters. By this arrangement any letter received by the Post Office to which a defaced stamp was affixed would be regarded as an unpaid letter.

6. The proposal to adopt the unified stamp, therefore, resolves itself into the question on which side the balance of convenience to the public will lie. On this point the public alone can decide.

7. Before, therefore, taking any final steps to introduce the reform, His Excellency in Council considers it desirable to ascertain the opinion of the European and Native community as to whether it would be more generally acceptable that the public should have the facility afforded by the use of postage stamps instead of the one-anna revenue stamps, and at the same time incur whatever risks the individual runs in the way of fraud by leaving the stamps attached to letters without

any defacement, or whether the public regard the present practice of defacing postage stamps as so essential to their own interests as to make them willing to forego the advantages afforded by using postage stamps in the place of a revenue stamp in order that they may retain it.

8. Should public opinion be in favour of the proposed change, it would probably be necessary to modify the scheme in one particular. It has been already stated that in the United Kingdom the penny postage stamp only is admissable to denote the duty. Two half-penny stamps cannot be used for the purpose. To the course adopted in the United Kingdom, there could be no reasonable objection. The penny postage stamp denotes the lowest postage payable for a single letter, and is consequently much more used than any other denomination of postage labels. The half-penny stamp is comparatively little used, and it was probably considered that it was not worth while to print it in the doubly fugitive ink.

9. In this country the case is different. The half-anna postage stamp represents the minimum postage rate for all purposes, and in this respect answers to the penny stamp in England. As regards the convenience of the public, therefore, it is of more importance that the use of the half-anna stamp should be permitted for denoting stamp duty than the one-anna stamp should be capable of being so used. It will, therefore, probably be necessary, if the reform is introduced, to allow of the use of either a single one-anna or two half-anna stamps to denote the one-anna stamp duty. This can be

effected by the issue of a Notification under Section 9 of the Indian Stamp Act, 1879.

SPECIAL TRAINS FOR OVERLAND MAILS.

The arrival at Bombay of overland mails signalled after 9 P.M., involved so serious a detention, that your Committee represented to the Director-General of the Post Office that a late special train might be despatched at midnight to overtake the ordinary train at Jubbulpore by accelerating the rate of speed, or, failing that, to let the special run on to Allahabad to overtake the ordinary train at that station.

The latter alternative was sanctioned, as the authorities of the Great Indian Peninsula Railway were unable to increase the rate of running specials on their line: and the advantages of this arrangement have been felt by the general community, who have on several occasions since its introduction in October received their home correspondence a day sooner than they would have otherwise done.

From Chamber to Director-General of the Post Office.

Calcutta, 23rd June 1882.

The Committee of the Chamber of Commerce desire me to address you on the subject of the unusually long detention at Bombay of the London mails of the 19th May.

The *Telegraph Gazette* of Monday the 12th instant, contained the following notice:—"Bombay, Monday, 12th, 1-10; Mail steamer signalled at 22-50 yesterday (Sunday) Mails for stations beyond Jubbulpore leave by mail train at 6-30 P.M. to-day."

Consequently, allowing 3 hours for the mails to reach the Post Office after the steamer had been signalled, the mails were detained from 2 in the morning till 6-30 in the evening—or 16 hours and a half.

The Committee are aware that 11-30 P.M. is declared to be the latest hour a special train can be started from Bombay to overtake the ordinary train at Jubbulpore.

From Bombay to Jubbulpore the distance is 616 miles, which is run by the ordinary train in 27½ hours or at the rate of about 22½ miles an hour, and by a special, leaving 5 hours later, in 22½ hours or at the rate of a little over 27 miles an hour.

The Committee are not aware what the maximum speed is at which trains can run for several hours consecutively in India; but 27 miles an hour seems a

rate of speed which they think may be considerably increased for special service.

If a higher rate of speed be impracticable—for reasons which do not present themselves to the Committee—then it is suggested as an alternative arrangement, when the mail steamer arrives at such an hour as to admit of its adoption, that the special shall pass on to Allahabad and overtake the ordinary train there instead of at Jubbulpore, and this could be accomplished if the time of departure from Bombay were extended by 2 hours according to your letter of 5th May 1876.

From Director-General of the Post Office to Chamber.

No. 7472, *Simla the* 15*th September* 1882.

In continuation of my letter No. 3262, dated 28th June, I have the honor to state that the authorities of the Great Indian Peninsula Railway are unable to increase the rate of speed at which specials travel on the Great Indian Peninsula line of Railway.

But the Government of India has sanctioned the adoption of the alternative measure suggested by you, *viz.*, the substitution of Allahabad for Jubbulpore as the furthest point up to which a special engine is allowed for the carriage of the inward foreign mail.

Under this arrangement, when the mail steamer is signalled up to midnight, a special engine will be ordered, and the ordinary train overtaken at Allahabad. This

represents an advantage of three hours over the present arrangement, under which a special is never used when the steamer is signalled later than 9 P. M.

From Chamber to Director-General of Post Office.

Calcutta, 21st September 1882.

The Committee of the Chamber of Commerce direct me to acknowledge the receipt of your letter No. 7472 of the 15th instant, and to thank you for the information you have been good enough to send them regarding the special mail trains from Bombay.

The Committee are glad to learn that you have obtained the sanction of Government to the adoption of their suggestion, that with the view to obviate the detention at Bombay of overland mails when the steamer is signalled up to midnight, a special engine shall proceed with them as far as Allahabad instead of Jubbulpore, so as to overtake the ordinary train for Calcutta.

This is a satisfactory decision, and the early despatch of mails from Bombay will be appreciated by the public.

THE SUEZ CANAL.

THE POSITION OF ALL INTERESTS IN THE EVENT OF INTERRUPTED TRAFFIC.

For some time at the commencement of hostilities in Egypt it was feared that the traffic through the Suez Canal would be stopped, and the Committee considered it desirable to take

their solicitors' opinion with reference to the position in which all those interested would be placed by the happening of such a calamity.

The question was exhaustively dealt with in all its points by Messrs. Sanderson & Co., with whose ideas Mr. Evans also agreed.

Fortunately the brilliant *coup de main* by means of which Lord Wolseley secured the principal points on the Canal guaranteed its safety during the war, and ultimately the speedy termination of the campaign rendered any further consideration of the subject unnecessary.

No. 6297.

Calcutta, 5th July 1882.

With reference to the request of the Committee that we should advise the Chamber on the subject of the difficulties likely to arise from the possible closing for traffic of the Suez Canal with regard to merchandise afloat on board steamers bound for Europe *viâ* the Canal, we beg to state our views as follows :—

The questions which would arise in the event of the closing of the Canal would be exceedingly numerous, and would be complicated and difficult. They would comprehend the following, *viz.* :—

The position of the owners of the ship.
do. of the shippers of the goods.

The position of holders of Bills of Lading under letters of hypothecation.

do. of persons who have bought goods at home.

do. of the underwriters.
of *(a)* the ship.
and *(b)* the cargo.

do. of the Master as Agent for all interests.

We understand it to be the wish of the Chamber that we should indicate our views with reference to the position in which all the above interests would be placed by the happening of such a calamity to the Eastern Trade as the interruption for any time of the Canal traffic would be.

We think that we can best comply with this wish by dealing with the questions suggested in the letter signed "Nauticus," which appeared in the *Englishman* of the 30th ultimo, and this we propose to do *seriatim*.

In the event of a stoppage of the Canal, homeward bound steamers would be bound to remain as near to Suez as they could safely lie until the re-opening of traffic, and then proceed to deliver their cargo at its original destination.

There is no English authority precisely in point, but a very similar case (Hands *vs.* Baynes reported in 4 Wharton's Reports, p. 204, and referred to in Angell on Carriers Sec. 177) has been decided in America in which the view above expressed was taken by the Court. That was a case in which the defendant was the owner of a vessel on board which the plaintiff shipped some goods

from Philadelphia to Baltimore, "*viâ* Chesapeake and Delaware Canal." The locks of the Canal being out of order, the vessel could not get through, and the Master then proceeded down Chesapeake Bay with the intention of going round to Baltimore, but in a gale of wind the vessel grounded and was lost. In this state of things the Court held that the Master had wrongly deviated from his voyage, and that the defendant was liable for the value of the goods.

The English cases most nearly in point are the following, *viz.* :—

Schilizzi *vs.* Derry, 4 Ellis and Blackburn, p. 873, in which it was held that a ship having to proceed to Galatz was not by reason of her inability to get over the Bar at the mouth of the Danube for two months, excused from performing her voyage.

Hudson *vs.* Ede, 2 Law Reports, Queen's Bench, page 566, same case on Appeal, 3 idem, page 412, in which a vessel having to load at Sulinah was held bound to wait at her owner's expense to allow of the arrival of her cargo which was prevented from coming down the Danube by ice; and Metcalfe *vs.* Brittania Iron Works Company, 2 Queen's Bench Division of the Law Reports, page 423, in which a ship carrying a cargo of iron for Taganrog arriving at Kertch (300 miles from Taganrog by sea), and finding the buoys removed from the mouth of the Sea of Azof, and the navigation of that sea closed by ice, was held to be wrong in landing her cargo at Kertch, and not entitled to freight.

It will be observed that none of these cases deal with a permanent impossibility of reaching the destination of the voyage by the route prescribed, but only with a temporary interruption to navigation of more or less gravity; and we have been unable to find any cases in which any point has arisen which would be in any way analogous to the one under consideration, but we think that these will be near enough, as it is difficult to suppose it possible that the Suez Canal can ever be permanently closed.

It will be observed that all the forms of Bills of Lading placed before us contain a provision, that in the event of blockade or interdict, &c., at the port of discharge, the ship is to be at liberty to discharge at the nearest safe port; but we are clear that the case of the stoppage of traffic in the Canal was not contemplated by this clause and is not met by it.

2. The master of a steamer arriving at Suez and finding the Canal blocked would not in our opinion be safe in returning to Aden in any events which are likely to happen as long as he could lie at Suez in safety.

3. The master of a Canal steamer would not in our opinion be right in altering his voyage and proceeding *vid* the Cape in any case without full notice to, and obtaining the sanction, if possible, of the owners and underwriters of the ship and cargo; in the absence of such sanction, we do not think that under the present form of Bill of Lading the closing of the Canal would justify an alteration of the voyage to one round the Cape and prevent the latter from being treated as a deviation. In the event

of the voyage being altered a purchaser of goods to arrive per Canal would be entitled, we think, to throw up the goods.

4. As the alteration of the original voyage could not in our opinion be safely made without the consent of all interested, the matter of freight would probably be one of arrangement.

5. Unless a vessel could show conclusively that it was impossible for it to carry its cargo to the original port of destination, the master would not, under the present form of Bill of Lading, be entitled to discharge his cargo in the Red Sea or at Aden; if he were to do so, he would lose his freight and become liable to all damages the owner of the goods might sustain. *See answer to question* 1.

6. The landing of goods in the Red Sea, or at Aden, would be, of course, an abandonment of the voyage, and the moment a voyage is abandoned the policy of Insurance lapses.

7. In the circumstances above referred to, the position of *bonâ fide* holders of Bills of Lading would be as follows:—

Subject to the necessary delay which a stoppage of traffic in the Canal would cause, *bonâ fide* holders of Bills of Lading would be entitled, subject to the exceptions contained in that document, to recover their goods or their value; the latter being recoverable in case of loss from the underwriters, if the loss is caused by the perils insured against, or from the owner of the vessel if the loss

is due to any unauthorised deviation made from the voyage as above pointed out.

8. It would depend on the terms of the contracts for goods sold for shipment *viâ* Canal, how shippers would be affected by the stoppage of traffic in the Canal. If the contract were for shipment in a particular vessel, the shipper would have done all in his power to carry out his contract and the buyer would have to take the goods notwithstanding any delay there might be in their arrival. If, on the other hand, the contract did not specify any particular vessel, but merely provided for the goods being carried *viâ* the Canal, we think the buyer would be bound to take the goods notwithstanding any unavoidable delay.

It will be seen from the above that in our opinion the owners of steamers trading through the Canal are the persons most likely to suffer in the present state of things, the shippers of goods being reasonably safe, provided the owners of the vessels on board which the goods are placed are responsible persons, and able to meet any claim for damages which may arise from a wrongful dealing with the goods.

There would probably not be any doubt on this point in regard to the owners of well-known lines of steamers regularly trading here, but it has to be borne in mind that the steamers trading to this port are by no means confined to the regular lines, but include a great many outside steamers of the ownership of which little or nothing is known.

It is hardly likely that owners of steamers will be inclined to allow a state of things which may involve them in very serious liability to continue without an effort to throw the risk upon the shippers of goods, and we may look shortly for the introduction into homeward Bills of Lading of a clause providing for the case of a stoppage of the Canal in some such manner as blockade, &c., are provided for in the present form of Bill of Lading.

Any such attempt as this should, however, in our opinion be resisted with determination by shippers, and the opportunity availed of to insist on a general revision of the Bill of Lading on the lines indicated in the report of the Committee of the Chamber of the 12th October last.

A practical mode of carrying this out would be for the Chamber to publish a form of Bill of Lading, and for shippers to combine and refuse to take up any tonnage except on the distinct understanding that they should have this form of Bill of Lading.

We enclose copy of opinion of Mr. Evans, before whom we laid the draft of this letter.

Yours faithfully,

SANDERSON & Co.

H. W. I. WOOD, ESQ.,

Secretary,

Bengal Chamber of Commerce.

OPINION.

I have perused the papers, and agree in the views contained in the draft letter as amended. I have not gone into the question of a permanent stoppage of the Canal, as I do not regard that as practically within the bounds of possibility. I think it may be taken for granted that any stoppage can only be temporary.

To allow shipowners to land cargo at the Red Sea Ports or Aden would be out of the question.

I also think it very desirable to secure simplicity and uniformity in the common form of Bills of Lading, and to avoid needless and complicated exceptions in the common form—any special term agreed on can always be inserted. It is essential to the free negotiability of the Bills that all risks should be covered by Insurance, except the risks properly falling on the shipowner, and that the shipowner should not be allowed to contract himself out of those properly falling on him.

5th July 1882. G. H. P. EVANS.

PROPOSED ABOLITION OF THE SALT CHECK STATION AT CHITPORE.

As will be seen the Committee have given against the abolition of the Salt Check Station at Chitpore as closing the means of river transit to that point; but without being quite satisfied that much, if any, inconvenience would be caused

thereby, and in the circumstances have suggested to the Board that it would perhaps be better to ascertain the views of the native salt merchants interested before arriving at any decision in the matter.

From Board of Revenue to Chamber.

No. 1160 *B. Dated Calcutta the* 30*th October* 1882.

Under existing arrangements all salt which is transported from the port of Calcutta by the Eastern Bengal Railway is checked on behalf of Government at the Pass stationed at the Chitpore terminus. To this Pass station the salt, whether cleared from shipboard or from the Sulkea golahs, is conveyed by one of the three following routes, *viz* :—

(1) by the River Hooghly by boat;

(2) by the Port Commissioners' Tramway *vid* Armenian Ghat;

(3) by ditto *vid* Ruthtollah Ghat.

In July last the Agent to the Eastern Bengal Railway brought to the notice of the Board that the carrying out of the checks at Chitpore frequently causes the detention there of the wagons containing the bags of salt, and that serious delay is thus often occasioned to business; and he suggested either that the preventive establishment at the Chitpore Pass station should be strengthened, or that preventive officers should be posted at the Ruthtollah and Armenian Ghats to do some part of the work which is at present done at Chitpore.

The question was referred to the Collector of Customs for report, and that officer now proposes to abolish the Chitpore station altogether, and to transfer the check either to the Armenian or to the Ruthtollah Ghat.

	Vid Ruthtollah Ghat	*Vid* Armenian Ghat.	By River.
	Mds.	Mds.	Mds.
1881	3,76,542	166,946	1,89,126
1882 Jany. to July	2,84,579	1,28,476	93,250
Total	6,61,121	2,95,422	2,73,376

It is observed that the Traffic returns as per margin unmistakably indicate that the river traffic is gradually diminishing, and is being displaced by the traffic on the Port Commissioners' Tramway.

As far as it affects those who already use the tramway in despatching their salt to Chitpore, the transfer of the check station from Chitpore to one of the Port Commissioners' tramway ghats is both practicable and desirable, but the consequence will be that salt will no longer be able to be taken to Chitpore by river. No doubt the figures show that the river transit has much diminished and is farther diminishing, but some 22 per cent. of the despatches are still carried by the water route, and the Board feel some doubt whether the time has come for closing the means of river transit.

Under these circumstances I am to request that you will move the Chamber of Commerce to favor the Board with an expression of their opinion as to whether the closing of the river route to Chitpore will be attended with any inconvenience to the salt merchants.

From Chamber to Board of Revenue.

Calcutta, 13th November 1882.

I have submitted to the Committee of the Chamber of Commerce your letter No. 1160B of the 30th ultimo, relative to the proposed abolition of the Pass station at Chitpore at which salt for transport by the Eastern Bengal Railway is checked by Government officers.

The Committee desire me to say, in reply, that, as far as they can judge of the matter, it appears to them that the abandonment of Chitpore as a check station and the consequent closing of the means of river transit to that point would be an inconvenient disturbance of existing arrangements; for, although the figures which you have been good enough to place before them show that the traffic *vid* Chitpore is much less than at Armenian and Ruthtollah ghats, still the quantity sent by that route is not inconsiderable.

Before deciding this point, however, perhaps the Board may find it more convenient to ascertain the views of salt merchants themselves, either directly or through the Collector of Customs.

LANDING AND DELIVERY OF SALT AT GOVERNMENT GOLAHS AT SULKEA.

Many members of the Chamber will be pleased to notice from the following correspondence the proposals made by the Board of Revenue

and Collector of Customs for facilitating work at the Government Salt Golahs at Sulkea.

The proposals have had the Committee's approval, and it is to be hoped they will be carried into effect with the least possible delay.

---

451 B

Copy, with copy of the enclosure, forwarded to the Secretary of the Bengal Chamber of Commerce, with the request that the Lieutenant-Governor may be favored with an expression of the Chamber's opinion on the proposals.

By order of the Lieutenant-Governor of Bengal.

(Sd.) A. P. MACDONNELL.

Offg. Secy. to the Government of Bengal.

DARJEELING,
REVENUE DEPARTMENT,
Miscellaneous Revenue.
The 21st September 1882.

From Board of Revenue, L. P., to the Government of Bengal.

No. 768*B. Dated Calcutta the 8th September* 1882.

In Government order No. 1682-20S, dated 18th July 1881, the Board were directed, after consultation with the Collector of Customs, Calcutta, to submit a report on the application by the Superintending Engineer, Central Circle, for the sanction of Government to the expenditure of a sum of Rs. 6,617 for certain additions and repairs to the jetty of the

H. A. COCKERELL, ESQ., C. S., I.

Sulkea Salt Golahs. In Board's No. 194, dated 15th March 1882, it was explained to Government that the jetty as at present constructed had practically been found to be of little or no use, but that certain proposals made by the Collector with a view of utilizing it for the discharge of salt from both ships and boats, by lengthening it and by placing pontoons on either side of it, were under consideration, and that the Government would be again addressed on receipt of a further report and estimates which had been called for from the Collector.

2. I am now to submit, for the information and orders of Government, a copy of the letter from the Collector of Customs, marginally noted. The submission of this report has been somewhat delayed owing to its having been necessary to call for further information on certain points from the Collector, and to Mr. Cockerell's having considered it advisable to visit the golahs and enquire personally into the system followed in landing and clearing salt, before addressing Government on the subject. It will be observed that the Collector has for the present abandoned the idea of utilizing the existing jetty in the manner mentioned above, and that he has substituted a scheme for the construction of three floating stages, each of which will be connected with the shore by a gangway supported midway by a small pontoon. The stages will be moored along the bank of the river opposite to the alleys leading between the ranges of golahs to the north of the present jetty, and at a sufficient distance from the shore to insure their remaining afloat, and so being approachable by boats at low tide. It is proposed that the central stage, which

No. 378, dated 20th July 1882.

will be moored further out in the stream than the other two, should support a raised deck or platform on the off-side, to admit of salt being landed from shipboard, and that the rest of the stage, and both of the side ones, should be constructed to float nearly flush with the water, so as to be below the decks of the discharging boats from which the bags (weighing some two maunds each) are placed on the shoulders of the coolies standing below. The central stage, it is proposed, should be 120 feet in length by 15 in breath, the two side stages being each 100 feet by 12 feet. The cost of the former is estimated by the Collector at Rs. 20,500, and of the two latter together Rs. 28,200

3. Looking at the tenor of the opinions expressed by the several firms consulted by the Collector of Customs and to the general feeling which is known to exist on the subject, the Board are of opinion that the expense and difficulties attendant on bringing a vessel above the floating bridge are such that, whatever special facilities may be given for landing salt direct from shipboard on to the existing jetty or on to a pontoon constructed for the purpose, vessels will very rarely, if ever, be induced to unload above the bridge. The Board therefore consider it advisable to confine their remarks at present to the proposals made in paragraph 10 of the Collector's letter with reference to the immediate construction of the two smaller stages for the use of cargo and country boats. There can, the Board think, be no doubt that the scheme has much to recommend it to bonders and to persons clearing salt by water from the golahs, and it will be seen from paragraph 8 of the Collector's letter, that the principal bonders have expressed their en-

tire approval of the proposal, and their willingness to pay a small fee for the use of the stages. It is observed that the present system of landing and clearing salt is extremely laborious and inconvenient. The coolies engaged in the work have to walk slowly and cautiously along a plank from the boat to the bank, and then struggle through the mud and up the slippery steps of the ghat ; bags are occasionally lost by the bearer's losing his foothold on the plank, and the whole operation is slow and fatiguing. In reply to an enquiry by the Board, the Collector states that he is of opinion that the stages would be used at high as well as during low water, and he submits the following remarks of the Superintendent of the golahs on this point :—

"Much delay takes place in constantly pushing the boats back as the water recedes. The chances are that the boats would not commence to unload exactly at high water, and that the operation would not be finished before the water had fallen so much as to make it worth while to use the pontoons. The steps being covered with a slippery deposit of mud makes them at all times more or less difficult for a man with a heavy load on his head to walk up and down, and thus impedes the work.

"The advantages to be derived from pontoons would much more than compensate for the length of the lead. Judging from the crowds of boats round the Port Commissioners' pontoons, it seems bonders would much prefer their salt to be landed on to pontoons, and that the coolies would prefer it, too, they being perhaps the most interested in the question.

" No objection appears to it being compulsory to use the pontoons, always provided that there is sufficient accommodation, and this the scheme seems to provide for."

4. As regards the accommodation required for boats discharging salt, the Collector states that, roughly speaking, there are probably never more than 15 or 16 boats unloading at one time, and that the cooly contractors cannot, under the present arrangements, supply enough men to unload more than 35 to 40 boats a day. It will be seen from paragraph 10 of the Collector's letter that the two smaller stages will accommodate 18 boats at one time at low tide and 30 boats at high tide. There seems, therefore, reason to suppose that the two smaller stages will be quite sufficient to meet the requirements of the trade at ordinary times. There seems also to the Board no reason to doubt the small landing fee of 2 annas per 100 maunds, which it is proposed to levy from merchants and bonders of salt making use of the stages, will be willingly paid, and will be a sufficient return for the expenditure incurred. After full consideration of the subject, the Board desire me to express their entire approval of the Collector's proposal, and to recommend the immediate construction of the two smaller landing-stages, at the cost of Rs. 28,200, as estimated by the Collector. Should, however, Government not be prepared to incur so large an expenditure before giving the experiment a trial, I am to suggest that sanction may be given to the construction for the present of one of the stages referred to, the work being carried out through the Port Commissioners, if they will consent to undertake it.

5. As regards the existing jetty, I am to say that the Board do not apprehend that there is much prospect of its ever being made of any use for unloading salt ships. Besides the difficulties in the way of ships passing above the bridge, there is the objection against the jetty that it does not rise and fall with the tide. The Board have also learnt that, since the submission of the Collector's report, the front part of the jetty has had to be removed owing to the piles having given way, and the Superintendent of the golahs reports that there is not now water enough for a ship to moor alongside. It seems, however, possible, if the remaining portion is sound, that the jetty might at some future time be utilized by being connected with a landing-stage, as suggested in the 10th paragraph of Mr. Grimley's letter. The Board, however, before making any suggestion on this point, have asked the Port Commissioners, whose Engineer has special experience in such matters, for an expression of their opinion on this subject, and a further report will be submitted to Government in due course.

From the Collector of Customs, to the Board of Revenue, L P.

No. 378, *Dated Calcutta,* 20*th July* 1882.

In my letter No. 335, dated the 26th August 1881, I had the honour to inform the Board that I had under consideration a scheme for the better utilization of the jetty facing the Sulkeah Salt Golahs. I suggested that by lengthening the jetty, and making it available for ships, inducements would be offered to salt vessels to come through the bridge, and land their cargoes direct on to the

jetty instead of landing the salt by means of cargo-boats, and I further proposed the erection of pontoons and gang-ways in conjunction with the jetty for expediting the landing of salt from boats.

2. In reply, the Board referred me, as regards the jetty question, to the letters marginally noted, from which it appears—to quote the Board's words—that when the jetty began to be used in 1862-63, "owing to the shallowness of the stream at the head of the jetty, no ship could possibly approach it; that country-boats could only do so with great difficulty and danger, and that, so far from facilitating the receipt and discharge of salt, the jetty was found to be a failure and an useless erection from the first." I was asked to report whether the jetty was ever used again after the first experiment in 1863; and, if so, with what result. The Board also remarked that it was clear from the former reports that the jetty could not be used in its present state, and that, in reporting on the matter further, it would be necessary to take into consideration the probable outlay for extending the jetty to make it available for the purpose, and whether, considering the risks and charges which would be incurred by ships going above the bridge, the work is ever likely to be really useful and remunerative. The Board also desired me to consult the Superintending Engineer, and also the bonders and purchasers of salt, and to submit a detailed report on each of the suggestions.

No. 160 dated 20th March 1862.
" 108 " 17th February 1863.

3. Before writing to the Superintending Engineer, I addressed several firms who are interested in the salt trade,

as well as the Bengal Chamber of Commerce, describing in general terms the nature of the proposals, and asking them to favour me with their opinion on the subject. I give below an extract from, or an abstract of, the replies received—

Messrs. Turner, Morrison & Co.—"Your suggestion to utilize the jetty for landing salt direct from the import vessel is admirable; but we would venture to advocate an extension of the scheme.

"We have visited the golahs, and find that the frontage is sufficient to berth three vessels in line. We, therefore, suggest that a series of three pontoon landing stages be put down, each opposite one of the alleyways between golahs. The centre pontoon would, of course, be connected with the jetty, and the flank pontoons might be connected with the shore by gangways laid over smaller pontoons.

"If these arrangments were carried out, it would scarcely be necessary to repair the jetty to its full length. The portion now falling into the water might be removed, and the rest of the jetty could then, we imagine, be made good at a comparatively small expenditure.

"The improvements suggested would not interfere with the boat traffic; but, on the contrary, might be utilized to facilitate the landing of salt from lighters, which, as you say, is at present conducted in a primitive, risky, and wasteful fashion.

"Importers would certainly be glad to pay a reasonable toll for the convenience of passing salt over the stages di-

rect from the ship, and we feel sure that the expenditure on pontoons, &c., would rapidly be recouped to Government.

"The cost of landing a sailing ship's cargo, say 2,000 tons of salt, over the stages, would amount to about Rs. 20 per 1,000 maunds. This estimate includes all charges for moving the vessel from off town to the golah moorings and back again, but does not include any toll payable to Government for use of the stages. The cost of landing by means of boats in the ordinary way varies from Rs. 26, upwards."

Messrs. Kettlewell, Bullen & Co.—state that Liverpool salt ships rarely go above the bridge direct to the jetty to discharge cargo, and consider it desirable that there should be a stage for salt lighters large enough to accommodate several at a time. Importers desire, above all things, to keep down working expenses, and would no doubt pay a small jetty charge if they got good accommodation in lieu of the present crude system of landing by coolies.

Messrs. Graham & Co.—think it would not be practicable for ships to pass through the bridge up to the golahs; it would be specially inconvenient in the case of their vessels who only bond a part of their cargo. They think well of the proposal to utilize the jetty for the landing of salt from boats, and consider that the convenience afforded by pontoons would enable the bonder to pay a small jetty charge to meet the necessary expenditure.

Messrs. Crooke, Rome & Co.—are of opinion that both time and money would be saved by the adoption of both plans, and they would gladly pay any small charge required for the use of the jetty.

Messrs. Duncan Brothers & Co.—"The difficulties and disadvantages of taking ships alongside the jetty to discharge are such as would, we think, preclude its general use. The chief one is the risk attending the passage of vessels through the bridge, especially in the present state of the river, added to which is the extra cost for steam-hire there and back to moorings, and the enhanced cost of coolie labour at the golahs, now that Messrs. Bird and Co. have given up the contract. We may state that on one occasion when we thought of sending a ship up to the golahs to discharge, we were prevented by the coolie-contractor insisting on double the rate for which he was discharging boats, thus doing away with the saving in cost which we expected to secure by this method.

"With regard to your second proposal, *viz.*, to make the jetty suitable for the discharge of salt boats, we think it the more feasible of the two, but we should not like to see any further addition to the cost of bonding, as the charges, we think, are already quite high enough."

Messrs. Shaw, Finlayson & Co.—think that pontoons arranged around the jetty would prove a great convenience and expedite the landing of salt. The objection to taking a vessel from the moorings through the bridge would be the expense involved. In addition to loss of two days, the steam-hire, Harbour Master's fees, &c., would amount to Rs. 600 or Rs. 800.

Messrs. Balmer, Lawrie & Co.—"We have often thought how much easier the discharge of bonded salt could be effected if ships were moored alongside the golahs, and communication established with the ghât leading up to the

golahs by means of pontoons, and we feel sure bonders would willingly pay a small tax to clear off the cost of construction and maintenance of the pontoons. The great difficulty we see is that of inducing shipmasters to take their vessels through the bridge, as they would, of course, seek to lay the responsibility upon the owners of the salt for any accidents that might occur through the negligence of the port officials or otherwise.

"Then, again, frequently only portions of cargoes are bonded, and if at the time export cargo was being taken in, commanders would probably absolutely decline to take their vessels through the bridge; steam-tugs will not, as a rule, go through the bridge, in case of being unable to return the same tide; besides which, there would be considerable expense for towage and Harbour Master's fees."

Messrs. Gladstone, Wyllie & Co.—are afraid lest the expenses of taking ships to the golahs through the bridge and the risk of delay before and after discharge, while waiting for the bridge to open, would not, except under extraordinary circumstances, be compensated for by saving in time. They think well of the plan of using pontoons alongside which the salt boats might be placed, provided that salt discharged at the pontoons is placed in golahs close to the jetty. The difficulty with pontoons is that the level of the boat deck and that of the pontoon being about the same, the coolie standing on the pontoon would require the salt hoisted on to his head, &c.; also, that pontoons would only be of value in the case of golahs close to them.

Messrs. Wiseman, Mitchell, Reid & Co.—are in favour of the construction of two or three pontoon T-shaped jet-

ties, similar to the one opposite the P. and O. Company's office, so that boats could be discharged outside as well as inside. In an emergency, and when quick despatch is necessary, the facilities of a jetty alongside would be greatly appreciated. On the whole, they support the scheme for the repairs of the jetty at all events, and think that a small charge would meet the cost soon, and that they would use the jetty whenever practicable.

The Chamber of Commerce—considered the question at a meeting at which I was invited to be present, and the following is an extract from the reply which was afterwards sent:—"The Committee have given their thoughtful attention to your proposals, and they are of opinion that their adoption would be attended with marked advantage to that portion of the salt traffic which requires the accommodation afforded by the Government golahs, provided the several points dwelt upon in discussing the subject with you are kept prominently in view. These are—

"1*st*.—That the series of pontoons should be of size and strength capable of accommodating the largest class of vessels, whilst at the same time they should be adapted for receiving salt from lighters;

"2*nd*.—That the utmost possible facilities should be afforded to ships using the pontoons for rapid despatch, untrammelled by routine obstructions beyond such as are absolutely necessary to protect the revenue, and

"3*rd*.—That charges for pontoon accommodation should be on the lowest possible scale.

If these conditions, *viz.*, suitable landing arrangements, expeditious discharge, and a low scale of charge can be secured, the Committee believe that the objections which, in some of the replies to your letter, are taken, on the ground of inconvenience and expense which vessels would incur in passing the floating bridge, would lose much of their force; and that results might follow from the adoption of your proposals such as would be sensibly appreciated by the shipping interests."

4. I have considered the objections which were made in 1862 and 1863 to the jetty by the Superintendents of the Golahs. Undoubtedly very little advantage was taken of the jetty at the time, and there is nothing on record to shew that the jetty was ever used after the first experiment. This may have been owing to the shallowness of the water in front of the golahs, but it may also be possibly due to the circumstance that the Golah Superintendents gave but lukewarm support to the undertaking. The depth of the water in 1862 is not stated, but some idea of the present depth may be gathered from the fact, that in the month of September last year, a steamer laden with 82,000 maunds was lying off the jetty, and I am informed that a vessel drawing 22 feet might anchor and discharge her cargo at any season of the year.

5. After being favoured with the opinions of the chief bonders of salt, which, it will be observed, are favourable to the scheme, I addressed the Superintending Engineer, forwarding him a copy of the correspondence, and requested him to give an estimate of the cost of altering the jetty and constructing landing stages in the manner proposed.

That officer, however, was unable to take up the matter, and in December last, on his leaving Calcutta on special duty, transferred the papers to the Executive Engineer of the Burdwan Division, who gave his opinion that, owing to heavy expense and to difficulties arising from the difference of a level at low tide between the existing pier and the proposed floating stage, the idea of utilizing the jetty in the manner comtemplated was impracticable and should be abandoned. After some discussion of the subject this view was adopted, and it was agreed that the project of constructing pontoons to facilitate the landing of salt should be considered quite apart from that of repairing the existing jetty. It was arranged that a rough estimate should be prepared for three floating stages, each about 150 feet long, connected with the existing steps in front of the salt golahs by pivotted gangways, the upper end of which should be above high water when the river is in flood, and the lower end should rise and fall with the tide. The Executive Engineer, after consulting with the Vice-Chairman of the Port Commissioners, forwarded a statement in which the cost of the proposed stages was set down at from Rs. 40,000 to Rs. 45,000 each. The details of the estimate were not given, but from enquiries made at the Port Commissioners' office, I have learnt that it is far beyond our requirements. The estimate includes an iron roof to the floating stages, as well as the gangways or bridges, similar to the roof provided to the landing stage for goods on the Strand in front of the P. and O. Office. Leaving out the roofing, the cost would come to about Rs. 34,000 for each stage, or Rs. 1,02,000 in all—an expenditure much larger than was contemplated, and

that would necessitate the imposition of a fee for the use of the stages heavier than the salt trade would bear, in order to recoup the outlay. I have, therefore, modified the original proposal. In place of three stages, each 150 feet in length, I would provide a central stage opposite the middle alley of the golah, 120 feet in length by 15 feet in breadth, and a stage on each side, 100 feet by 12 feet. The smaller stages should be placed at a distance of 80 feet from the shore, and be connected with it by a gang-way or bridge eight feet wide. The bridge should consist of two parts, each 40 feet long, hinged together and supported by a pontoon 25 feet by 9 feet, fixed midway between the shore and the stage. The opposite ends of the bridge thus formed should be pivotted, one to the stage and the other to a wooden platform on shore. The stage, the bridge, and the pontoon would rise and fall with the tide. The whole would be similar in design to the floating stage at the Police ghat, facing Hare Street, and the following estimate, which is based upon the estimate for that construction, will be a sufficient guide to the cost of the proposed stages:—

	R.	A.	P.
1 Large stage, 100′ 0″ long, 12′ 0″ wide, complete...	8,000	0	0
1 Small pontoon, 25′ 0″ „ 9′ 0″ „ „ ...	1,950	0	0
2 Bridges, 40′ 0″ span, 8′ 0″ „ „ ...	2,525	0	0
Timber, 75 cubic feet, @ Rs. 3 per c. ft. ...	225	0	0
Shoes for shore end, 3 cwt., @ „ 19 „ cwt. ...	57	0	0
Iron tie-rods and bolts, 2 cwt., @ „ 19 „ „ ...	38	0	0

	Cwt.	qr.	lb.
Two 10 cwt. anchors for stage ...	20	0	0
8 fathoms of 1½″ chain for stage 40 „ of 1″	30	3	12

4 bending and 4 connecting shackles for stage	0	2	24		
Two 2½ cwt. anchors for small pontoon	5	0	0		
20 fathoms of ⅝" chain for small pontoon	4	0	27		
4 bending and 2 connecting shackles for pontoon	0	1	12		
	61	0	19	@	
Rs. 15 per cwt. ...					915 0 0
Add for contingencies					390 0 0
Total ...					14,100 0 0

6. The two smaller stages should be constructed almost level with the water, so as to be below the deck of a boat. In this way no hoisting of bags would be required from the boat, but a coolie standing on the stage with his head and shoulders on a level with the deck of the boat, would be able to receive the salt bag, and carry it away to the golahs. The larger stage should be made to accommodate ships on the offside, and boats on the innerside, which could be done by building the stage with a raised deck on the offside. It should be placed at a distance of about 150 or 160 feet from the shore. On the basis of the above figures its cost may be estimated at Rs. 20,000. The entire cost of the three stages may therefere be put down at—

	Rs.
2 floating stages, 100 feet by 12, at Rs. 14,100 each ...	28,200
1 floating stage, 120 feet by 15 ...	20,500
Total ...	48,700

7. The stages would be used not only for the receipt of salt, but also for the discharge from the golahs. The receipts and deliveries by boat during the last two years have been as follows:—

	Receipts.	Deliveries.	Total.
1880-81 ...	22,43,104	7,08,253	29.51,357
1881-82 ...	21,32,145	5,82,869	27,15,014

It is not easy to make an accurate forecast of the extent of bonding operations, as so much depends upon the state of the freight market, but there can be no doubt that the floating stages will give quicker despatch, which must necessarily bring about a reduction in the number of coolies employed and in the landing charges of the coolie-contractor, which would in all probability tend to increase bonding transactions. I think 30,00,000 maunds would be a safe estimate for the future.

8. The persons most interested in the matter are the salt bonders, the principal of whom have expressed their entire approval of the scheme, and their willingness to pay a small fee for the use of the landing stages. Besides the bonders there are the salt merchants who are concerned in the delivery of salt from the golahs. These merchants do not come in person to do business either at the Custom House or the golahs, but the business is conducted for them by their brokers and coolie-sirdars, many of whom have been consulted regarding the proposed arrangement. They are much in favour of it, and are quite willing to pay a landing fee, which I suggested might be fixed experimentally at 2 annas per 100 maunds. On the matter being

explained to them they appeared at once to grasp a clear idea of the benefits that would accrue to them from the scheme. They all agreed that, apart from the general convenience of the arrangment, the work of bonding and discharging salt would be carr ied on with greater rapidity and at a less cost for coolie labour than at present, while the wastage which occurs under the existing system from salt upsetting into the water, would be entirely avoided. The disadvantages of the present system are described in my letter No. 335 of 26th August 1881. It must also not be overlooked that there would be a saving in boat-hire to the extent to which the receipt and discharge of salt were accelerated.

9. A landing charge of 2 annas for 100 maunds, calculated on 30,00,000 maunds, would yield Rs. 3,750, or over 7 per cent. of the estimated outlay, which may be. accepted as a sufficient return for the expenditure incurred When Messrs. Bird & Co. had the contract for the supply of coolie labour at the golahs, their charge for the carraige of salt from the boats to the golahs, and *vice versa*, varied with the distance of the golah from the river, and were on the following scale; the first line being the line of golahs nearest the river :—

1st line	...	...	Rs. 10	per	1,000 maunds.
2nd „	...	...	„ 11	„	„
3rd „	...	...	„ 12	„	„
4th „	...	...	„ 13	„	„
5th „	...	...	„ 14	„	„

A landing charge of 2 annas per 100 maunds would increase the cost by Re. 1-4 per 1,000 maunds, but against this extra charge would be the saving in coolie labour and

in boat-hire. A coolie's earnings at the golahs ordinarily varies from 6 annas to 14 annas per diem, while in times of pressure he can make as much as Re. 1-2 or Re. 1-4. A saving of three coolies only per 1,000 maunds, which is probably a low estimate, in average seasons would quite cover the landing fee, without reckoning the saving in boat-hire or the damage caused to boats by their grounding—a frequent cause of leakage and injury to the salt. If the convenience and facility afforded by the landing stage should have the effect of increasing bonding operations, the additional receipts from golah rents might possibly enable a reduction to be made in the landing fee, for I do not consider that we should attempt to make a profit out of the stages, but should be satisfied with a return sufficient to cover wear and tear, working expenses, and interest on money expended. The real advantage to Government will consist in the development given to the salt business.

10. The average breadth of a salt boat being 14 feet, a stage 100 feet by 15 feet would accommodate seven boats on the offside, one at each end, or nine boats in all. There would not be sufficient space for mooring boats on the inner-side, except at high tide when there would be room for six boats. The two smaller stages would thus accommodate 18 boats at the same time during low tide, and 30 during high tide. I propose that the two smaller stages be at once constructed, and that the erection of the larger and central one be postponed until some experience has been gained of the working of the new arrangements. If the small stages should prove a success, it may be found advisable to construct the large one on a much larger scale than is con-

templated in this report. I would leave the existing jetty standing for the present, as, notwithstanding the opinion of the Executive Engineer referred to in paragraph 5, I cannot quite give up the view that some use might be made of it in connection with a landing stage, It seems to me that it might be possible, by cutting away a portion of it, and by carefully regulating the position of the landing stage, to avoid entirely, or considerably lessen, the difficulty adverted to by the Executive Engineer arising from the difference of levels. At any rate, this is a matter which can be determined later on when the actual construction of the larger stage is finally considered, and it can do no harm to leave the jetty standing in the meanwhile.

11. If the Board and Government approve of the proposal, I would suggest that the landing stages be constructed through the agency of the Port Commissioners.

From Chamber to Government of Bengal.

Calcutta, 4th October 1882.

I have submitted to the Committee of the Chamber of Commerce your Office Memo: No. 451, of the 21st September, with copies of letters from the Board of Revenue and the Collector of Customs, relative to a proposal by the latter for facilitating the landing and delivery of salt at the Government Golahs at Sulkea.

The arrangements suggested by the Collector appear to be well calculated to afford material assistance to the salt

trade, and the Committee of the Chamber desire me to say that they entirely endorse the Board's approval of the proposal to proceed at once with the construction of the two smaller stages.

SHORT OUTTURN OF SALT CARGOES.

The following correspondence has been brought to the notice of the Cheshire Salt Association, but the Chamber are as yet without their reply.

From Collector of Customs to Chamber.

No. 2462, *dated the* 14*th July* 1882.

I have the honor to forward a statement of the outturn in the salt cargoes of certain vessels from Liverpool, from which it will be seen that the cargoes this year have turned out very badly as compared with the cargoes of the same vessels last year. The cause of this, I am informed by several ship-captains, is the careless use of a new kind of weighing machine lately employed on vessels in Liverpool. It is said that a large quantity of salt is thrown into the receiver or scale of the machine, and that before the scale has time to settle itself or recover from the shock, if once the scale turns the bolt is drawn and the salt goes down into the hold. No time being allowed for the scale to adjust itself, the weight recorded is only the apparent weight and is considerably less than the true one.

If you have any information on the subject, I shall be glad if you will inform me whether the explanation is correct. I am so far interested in the question that a lax system of weighment at the port of exportation considerably weakens the check which is kept upon our weighing officers. In past years the average of deficient outturn has been kept within reasonable limits, but it is now showing a tendency to rise.

From Collector of Customs to Chamber.

No. 2724, *dated the* 24*th July* 1882.

In continuation of my letter No. 2642, dated the 14th instant, I have the honor to forward the accompanying statements in further illustration of the unsatisfactory outturns of salt. The captains of the vessels named, assert that they are not receiving correct weights at Liverpool.

From Chamber to Collector of Customs.

Calcutta, 2*nd August* 1882.

The Committee of the Chamber of Commerce direct me to acknowledge receipt of your letters No. 2642 and 2724 of the 14th and 24th ultimo, forwarding statements shewing that the outturn of salt by certain vessels from Liverpool this year compare very unfavourably as regards percentage of shortage with the results obtained from the same vessels last year.

The excessive shortage complained of is occasioned, as you have been informed by several ship-masters, by

the careless use of a new description of weighing machine lately used in loading salt ships in Liverpool.

That may be so in some instances; but the Committee of the Chamber are rather inclined to attribute the heavy deficiences generally to the fact that salt furnishers have begun to realize that the vigilant watch on discharge which is kept by the Customs' Authorities here, rendered necessary by the high rate of import duties levied on the article, relieves them of any anxieties as to the exact quantity put on board; and many of them have become content to be paid on the quantity discharged, *plus*, say, 4 or 5 per cent: which experience has shewn to be about the proper allowance for natural wastage during the voyage of a first-class ship.

The Committee will, however, bring the matter to the notice of the Cheshire Salt Association, and let you know the result.

STORAGE AND VENTILATION OF JUTE CARGOES.

It will be seen from the accompanying correspondence that the Dundee Chamber of Commerce have again brought to notice the damaged condition in which portions of cargoes of jute are sometimes received, and that they have submitted various recommendations as regards ventilation and other means for preventing the jute from being damaged. The Committee replied that

as the jute referred to had been shipped from this port during the rainy season, the reasonable conclusion was not that all proper precautions to ship the jute in sound and dry condition had been neglected, but that at that time of the year it was impossible to obtain jute entirely free from inherent and absorbed moisture. As regards ventilation on board ship, the Committee considered that to be a matter of expense to the ship and one of special arrangement with shippers, as had already been remarked in a former letter to the Dundee Chamber.

From Dundee Chamber to Chamber.

21*st June* 1882.

WITH reference to your letter of the 10th February last, I herewith send you copies of circulars which have been transmitted to balers, merchants and brokers in Calcutta.

The Directors of the Chamber will be glad that you give them every assistance to carry out their views in preventing damage arising in cargoes of jute from Calcutta to this Port.

From Dundee Chamber to Balers, Brokers and Merchants.

20*th June* 1882.

At the Annual Meeting of this Chamber held lately, the question of the damaged condition in which consider-

able portions of cargoes of jute have been delivered at this port from Calcutta was brought before the Members, and a Committee, consisting of jute spinners, importers, and shipowners, was appointed to take this matter into consideration.

After investigation, it has been found that cargoes which have been shipped in the months of August, September and October are not only delivered in a much worse state than those shipped after that date, but frequently shew a very heavy deficiency in weight. This must arise either from the jute being packed in a wet state, or from being wetted in its transit to the vessel.

Balers, brokers and merchants are therefore requested to exercise special care in seeing that the jute is *properly dry before being packed*, and that it is *not wetted* in *transit* from the screw-houses or godowns to the vessel.

By these suggestions being thoroughly carried out, many questions and disputes would be avoided, which have been a source of annoyance and loss both to shippers and importers.

From Dundee Chamber to Brokers and Merchants.

20th June 1882.

At the Annual Meeting of this Chamber held lately, the question of the damaged condition in which considerable portions of cargoes of jute have been delivered at this port from Calcutta was brought before the Members; and a Committee, consisting of jute spinners, importers

and shipowners, was appointed to take this matter into consideration.

After investigation, it has been found that jute when put wet on board a vessel causes steam to arise and damages other portions of the cargo, unless the steam is entirely carried off by sufficient ventilation.

Recommendations proposed by our harbour cargo surveyors, who are old experienced commanders in the trade, and have given the matter their best consideration and attention, are now annexed. These suggestions are therefore strongly urged to be carried out as far as practicable.

By doing so every one connected with the trade would be benefited, and disputes and questions prevented, which have been a source of annoyance and loss both to shippers and importers.

Recommendations referred to

VENTILATION :

1. That there should be at least six ventilators of not less than 18 inches diameter, elevated 7 to 8 feet above the main deck, continued by venetian shafts through the 'tween decks into the hold, with an air space under both decks of not less than 3 inches—fore and aft the vessel—these ventilators being placed at equal distances between the fore and aft hatches.

2. That two strong ventilators, about 3 feet high and 15 inches diameter, be fitted with screw covers in the main hatch.

3. That one of each of the hatches is to be kept open during the voyage when the weather permitted.

4. That the hatches are not to be filled close up with jute, but an air space left all round the combings.

5. That the spaces between the vessel's frames adjoining the lower deck are to be kept open to allow the steam to ascend from the lower hold.

6. That the ventilators are to be carefully attended to at sea.

ALSO:

1. That the old plan of sweat boards, formerly fitted under the stringer plates of the upper deck, would be very beneficial to a jute cargo, by carrying off much of the condensed sweat, also forming an air space where most required.

2. That matting round the sides be discontinued, as mats get saturated and retain the sweat; dry sticks or permanent dunnage being preferable, allowing it to escape.

3. That no bone meal or broken stowage be carried with jute cargoes.

From Chamber to Dundee Chamber.

Calcutta, 26th July 1882.

I have the honor to acknowledge the receipt of your letter of the 20th June, containing a report and recommendations relating to the shipment of jute from this port to Dundee, by which balers, brokers and merchants

are requested to exercise special care in seeing that the jute "is properly dry before being packed," and that it is "not wetted in transit from the screw-houses or godowns to the vessels."

As you have placed yourself in direct communication with the leading jute merchants, brokers and balers in this city, the Committee of the Chamber have no doubt the parties concerned will give special attention to your suggestions and adopt them if practicable.

From the statements made by experts under direction of your Chamber, it appears that comparatively more damage was found in the jute shipped during the prevalence of the south-west monsoon than before or after that season, and the Committee are of opinion that the fault may be attributed less to carelessness on the part of shippers or balers than to the state of the atmosphere.

The Committee apprehend that masters of vessels leaving at that period of the year, when the weather in the Bay of Bengal is often threatening and boisterous, will be unable to act upon your suggestion for opening hatchways without danger to ship and cargo; this must necessarily be left to the judgment of the master of the ship, who, after leaving port, is of course beyond the control of local agencies.

As to ventilation of cargoes, that is a matter of expense to the ship and one of special arrangement with shippers, as already represented in the Chamber's letter of 10th February last.

The Committee of the Chamber think that if home buyers of jute would agree to pay the master a small

gratuity for each bale sound delivered, the interests of the owner of the goods would probably receive more attention.

The Committee are also of opinion that the recommendation to shipmasters should be more properly addressed to shipowners in Great Britain and elsewhere, because their agents here are left, in most instances, without instructions on this point, and shippers are therefore not in a position to follow the suggestions made by your experts.

As a rule, carters of merchandize during the monsoon season are provided with tarpaulins for protecting the same from rain; that only in very exceptional cases this is neglected is best proved by the large exports during the rainy months of seed and grain, which are much more liable to damage by wet than hard-pressed bales of jute, and by the fact that no complaints in respect of such cargoes have come to the knowledge of the Chamber.

Of late years nearly all large jute baling establishments have erected commodious premises on the banks of the river, and bales are conveyed in covered cargo boats alongside vessels, and commanders are requested to grant clean receipts, so that no cargo be taken on board which is not in good condition.

Practically, therefore, all proper precautions appear to be taken for the shipment of jute in sound and dry condition, and if the fibre is landed at Dundee in a state to which your Chamber has drawn attention there can be no other reasonable conclusion than that at the time of baling, at this season of the year, it is impossible to obtain newly cut and prepared jute entirely free from inherent and absorbed moisture.

ACCEPTANCE OF BILLS SUPRA PROTEST.

The Government of India having had under consideration the practical difficulties experienced in carrying out the provisions of Sections 108 and 109 of the Negotiable Instruments Act, 26 of 1881, which require that the person who intends to accept *supra protest*, or for honour, shall appear personally before a Notary and go though the prescribed formalities, were of opinion that the inconvenience attending that procedure might be removed by amending the Act so as to render such acceptance binding without those formalities, or by appointing employés of banks to be Notaries Public to facilitate such acceptance in transactions in which the Banks might be interested.

The Committee of the Chamber having been invited to express an opinion on the subject, replied, to the Government of Bengal, that the local banks considered that acceptances and payments of bills *supra protest* should be binding in the same manner as are ordinary acceptances and payments : and that while the formalities under the Act were unnecessary, their compulsory observance would be an inconvenience to native merchants and bankers who were not accustomed to them.

From the Government of Bengal to Chamber.

No. 1785—31*Mis.(R.)Calcutta, the 27th July* 1882.

In forwarding the enclosed copy of a letter No. 11—879, dated the 23rd June last, from the Secretary to the Government of India in the Home Department, on the subject of the difficulties experienced in carrying out the provisions of sections 108 and 109 of Act XXVI of 1881 (the Negotiable Instruments Act), I am directed to ask that the Chamber will be so good as to favour the Lieutenant-Governor with an expression of their opinion on the questions raised in paragraph 4.

From Government of India to Government of Bengal.

No. 11— 879. *Simla, the 23rd June* 1882.

I am directed to invite attention to Sections 108 and 109 of Act XXVI of 1881 (the Negotiable Instruments Act, 1881), which require that the person who intends to accept *supra protest* a bill of exchange which has been noted or protested for non-acceptance, or, for better security, should appear in person before a notary to make the declaration prescribed by those sections, and that unless he does so appear his acceptance shall be a nullity. It has been brought to the notice of the Government of India that practical difficulties are experienced in carrying out this provision of the law. Persons who are otherwise willing to accept a bill which has been noted or protested for non-acceptance, or, for better security, refuse to go before

a notary and make the required declaration in his presence; and Bank Directors and others are naturally unwilling to undertake the responsibility of recognising their legally incomplete acceptance.

2. In order to remedy this state of things, it has been suggested either—

(1) to amend Act XXVI of 1881, so as to render an acceptance *supra protest* binding without the formality prescribed by sections 108 and 109; or

(2) to appoint one or more employés of the Banks to be notaries public under the Act, so that persons willing to accept bills held by the Bank would not be obliged to appear before any outside officer.

3. There is reason to believe that the provisions of sections 108 and 109 of the Negotiable Instruments Act, in so far as they require the acceptor *supra protest* to present himself in person before a notary, are not in accordance with mercantile usage—at least as established in England; but that the usual practice is to send a clerk or agent to observe the necessary formalities on behalf of the acceptor.

4. Under these circumstances I am to request that you will be good enough to obtain and submit to the Government of India the opinions of respectable bankers and merchants, and of such other persons as may be qualified to judge, as to whether the preliminary formalities required by sections 108 and 109 of Act XXVI of 1881 are of any real value; and, if not, whether a modification of the Act is either necessary or desirable to bring the law into conformity with the ordinary practice in this country. Similar information

with reference to the requirements of section 113 in the case of a person making payment for honour should also be furnished.

5. In the meantime, with a view to the removal of the inconvenience which it is understood exists at present, the Government of India are prepared to take into consideration the expedient of appointing temporarily one or more of the principal employés of any Bank to be notaries public under Section 3 of the Act. I am accordingly to request that the names and designations of any officer whom the Directors would desire to see so appointed, whether at the head-quarters of the banks or at their mufassal branches, may be reported.

From the Chamber to Government of Bengal.

Calcutta, 16th August 1882.

I have the honor to acknowledge the receipt of your letter No. 1785 of the 27th July, and to enclose copy of the replies received from the several Banks in Calcutta to the inquiry submitted to them as contained in your letter.

The replies are unanimous only so far as an opinion that acceptances and payments of bills *supra protest* should be binding in the same manner as is an ordinary acceptance and payment.

It appears to the Committee that the formalities which are laid down as to be observed under sections 108 and 109 are unnecessary.

The occasions on which recourse to these formalities might be necessary are believed to be extremely rare ; and should they arise, the Committee are of opinion that the evidence on the bill itself of acceptance and or payment is sufficient, and that the further precautions by means of the formalities imposed under the said sections are vexatious and unnecessary.

So far, therefore, as the safety of the acceptor for honor is concerned, as between the drawer and the acceptor, sections 108 and 109 might be repealed ; but the Committee would say that as the Act has been passed very recently, and as the chance of any question arising in connection with the sections in question is extremely remote, it appears undesirable to make alterations of any sort in the Act until further experience of it has been gained.

The Committee believe that it would cause a serious inconvenience to native merchants and bankers to compel them to comply with formalities which are entirely foreign to their present custom.

ACT X OF 1870.
FOR THE ACQUISITION OF LAND.

Section 6 of this Act restricts the acquisition of land to those cases in which the cost is provided from the public revenues only, or out of some municipal fund, or by a Company ; and to meet other cases in which compensation may

be obtained from other sources it has been proposed to amend the Act.

The Committee having had the matter brought to their notice by the Government of Bengal, concurred in the expediency of introducing a provision which should include compensation by any Association recognized by special notification by the Government of India, and having for its purpose the erection of works or buildings which the Government may declare to be for a public purpose, and to which the public revenues may or may not have contributed.

From Government of Bengal to Chamber.

No. 178 *T-R., dated Darjeeling, the* 12*th June* 1882.

In forwarding a copy of a circular from the Secretary to the Government of India in the Revenue and Agricultural Department, No. 18—R, dated the 15th ultimo, I am directed to request that the Committee of the Chamber of Commerce may be moved to favor the Lieutenant-Governor with an expression of opinion on the points in respect to which they consider that Act X. of 1870 should be amended.

From Govt. of India to Govt. of Bengal.

Circular No. 18 *R. Simla, the* 15*th May* 1882.

I am directed to invite attention to section 6 of Act X. of 1870, which restricts the acquisition of land under the Act to cases in which the compensation is paid out of

public revenues, or out of some municipal fund, or by a Company.

2. It has been brought to the notice of the Government of India that the wording of this section prevents the acquisition of land at the cost of cantonment, nazul and other local funds, inasmuch as they cannot be deemed to be "public revenues"—a term which is applicable only to monies paid direct to Government. I am to request the opinion of His Honor the Lieutenant-Governor as to the advisability of amending the Act in this respect.

3. The names and constitution of the local funds existing in Bengal to which it is desired to extend the provisions of the Land Acquisition Act should be specified.

4. I am to add that the opportunity might be taken of the contemplated revision of the present Act to correct any other flaws in it which may have been brought to notice. On this point the opinion of His Honor the Lieutenant-Governor is also desired.

From Chamber to Government of Bengal.

Calcutta, 27th July 1882.

The Committee of the Chamber of Commerce desire me to acknowledge the receipt of your letter No. 178, of the 12th of last month, forwarding a copy of Government of India circular No. 18—R, dated the 15th May, relative to the advisability of amending section 6, Act X. of 1870, which restricts the acquisition of Land under the Act to cases in which the compensation is paid out of public re-

venues or out of some Municipal fund or by a Company; and reasons are given for the advisability of amending the Act in this respect.

The Committee of the Chamber having been requested to express an opinion on this point, direct me to signfiy their concurrence in the expediency of amending the Act so as to bring within its scope associations, which may be desirous of acquiring land, (other than those entitled so to do under sections 3 and 6,) and which are at present barred by the restrictive provisions of those sections.

Section 3 defines the term "Company" as a Company registered under the Indian Companies Act, 1866, or formed in pursuance of an Act of Parliament or by Royal Chart or by Letters Patent; and it is proposed that the following words be added, *viz.*, "or formed under a special Notification by the Governor-General of India in Council."

Section 6 runs as follows:—"Provided that no such declaration shall be made unless the compensation to be awarded for such property is to be paid out of public revenues or out of some municipal funds or by a Company."

To be consistent with the proposed amendment of section 3, the Committee of the Chamber suggest that the following words be added to section 6—"or association having for its purpose the erection of works or buildings which the Government have deemed and declared, by a special notification, to be for a public purpose and to which the Government revenues may or may not have contributed.

EARLIER HOURS FOR WORK AT THE JETTIES.

The Committee have to thank Government for extending the working hours at the jetty gates, without calling upon exporters and consignees of goods to pay any extra fees; but at the same time they would recommend the Port Commissioners to adopt means for remedying the block of carts which generally takes place in exporting and importing, and they believe that this can be most effectually arrived at by increasing the available number of gates and by keeping them all open during working hours.

From Port Commissioners to Chamber.

The 20th June 1882.

With reference to your letter of the 25th August 1881, forwarding a copy of a circular issued to members of the Chamber regarding a proposal to extend the working hours at the jetty gates, I am directed to inform you that the Commissioners, in pursuance of a resolution recorded upon the circular, addressed Government upon the subject, and, in reply to the representation made the Lieutenant-Governor has sanctioned, as an experimental measure for six months, the opening of the jetty gates with Custom House officers in attendance, at 8 A.M. instead of at 10 A.M.

The extra pay of the Custom House officers for the six months will be borne by Government, and exporters and consignees of goods will therefore be enabled to ship and take delivery of their goods from 8 A.M. to 6 P.M. without being called upon to pay extra fees.

From an advertisement published in the *Exchange Gazette* it will be seen that the Commissioners will give effect to these orders of Government from the 1st proximo, and I am to ask you to be good enough to take such measures as you may deem expedient to bring to the notice of the members of the Chamber this result of the movement initiated by your circular of the 25th August last.

From Chamber to Port Commissioners.

Calcutta, 22nd June 1882.

I am directed by the Committee of the Chamber of Commerce to acknowledge the receipt of your letter of the 20th instant, and to express their satisfaction with the steps that have been taken by the Port Commissioners, and sanctioned by the Government of Bengal as an experimental measure for 6 months, with the view to afford the trade of the Port greater facilities to exporters and consignees of goods by opening the jetty gates (with Custom House officers in attendance) 2 hours earlier than heretofore.

In expressing their acknowledgment of this concession, the Committee desire me to represent for the consideration of the Commissioners that general traffic would be

materially benefited by additional means of access to the jetties, as there are constant stoppages of loaded carts in consequence of the block which takes place at the jetty gates.

This is believed to arise in a great measure from the system of checking and tallying at present in operation, and the Committee would be glad if the Commissioners can see their way to introduce some change by which checks can be reduced, and generally to adopt such means of facilitating business as their experience of the working of the jetties may suggest.

IMPORTATION OF DYNAMITE.

The opinion of the Committee was requested by the Government of Bengal on the question, whether a notification restricting in any way the importation of explosives is necessary. The Committee, whilst fully recognising the great necessity for protecting the importation of explosives and especially dynamite, were of opinion that the question can be better dealt with by the scientific branches of the service, *viz*, the Ordnance and Engineering and Railway Departments of Government.

From Government of Bengal to Chamber.

Darjeeling the 15th June 1882.

I am directed to forward herewith a copy of a Memo. from the Government of India in the Home Department,

No. 837, dated the 31st May 1882, and of its enclosures, and to request that you will be so good as to move the Chamber of Commerce to favor the Lieutenant-Governor with an expression of their opinion on the question, whether a Notification restricting in any way the importation of explosives is necessary; and, if so, how the conditions of admission of explosives should be defined.

I am to request the favor of a very early reply to this letter.

From Government of India to the Govt. of Bombay.

" *No.* 835, *Simla the* 31*st May* 1882.

I am directed to acknowledge the receipt of your letter No. 1537, dated the 8th March last, on the subject of the importation of impure explosives into India.

In reply, I am to say that a Bill for the regulation of the importation, storage, and transport of explosives is at present under the consideration of the Government of India in the Legislative Department, but the completion of the measure may occupy sometime, and it is a question whether any *ad-interim* steps are necessary to prohibit the importation into India of impure explosives. With this object it has been suggested that the importation into India of introglycerine compounds should be prohibited, save—

(*a.*) when covered by a certificate of an anthorized Government official in the United Kingdom.

(*b.*) when similarly passed by some qualified officer of Government in India after the application of proper tests.

The importation of dynamite and other preparations of introglycerine can be regulated by a Notification in the *Gazete of India* under section 19 of the Sea Customs Act VIII of 1878; but as it is desirable that the exceptional powers given by this section should only be exercised in cases of special necessity, I am to request that His Excellency the Governor in Council will, after consulting the Chamber of Commerce and the Chemical Examiner to the Government of Bombay, favor the Government of India with his opinion as to whether a Notification, restricting in any way the importation of explosives, is necessary; and, if so, how the conditions of admission of explosives should be defined.

The favor of a very early reply is requested.

No. 837.

Copy of corresponpence forwarded to the Government of Bengal for favor of a very early report on the question raised.

From Chamber to Government of Bengal.

Calcutta, 26th June 1882.

I am directed to acknowledge the receipt of your letter No. 1538 of the 15th instant, and to say that in the judgment of the Committee of the Chamber of Commerce it is essential, in the interests of public safety, that the importation of so dangerous an explosive as dynamite should be attended with every precaution, and that until the Government of India have prepared a Bill to regulate

the importaion, storage and transport of explosives, a Notification should be issued prohibiting such importation except under the special permissive provisions (*a*), (*b*) referred to in the 2nd para of letter of 31st May to the Government of Bombay.

While the Committee give their opinion to this extent, they desire me to suggest that the question under reference, *viz.*, how the conditions of admission of explosives should be defined, is one that can be better dealt with by the scientific branches of the service, *viz.*, the Ordnance and Engineering and Railway Departments of Government, who are in the habit of employing explosive materials for blasting purposes, &c.

IMPORTATION OF COLORED COTTON GOODS IMPRESSED WITH DESIGNS OF GOVERNMENT CURRENCY NOTES.

Upon this subject the Committee were of opinion that, in the interests of Government and of the public, the importation of handkerchiefs or other manufactures impressed with designs of Currency Notes should be prohibited; and by a recent notification the Government have directed the prohibition of the importation into ports of British India of cotton goods impressed with designs in imitation of Currency Notes, Promissory Notes, or Stock Notes of the Government of India with effect from the 1st of March 1883.

From Government of Bengal to Chamber.

No. 2387, *J.—Calcutta the* 13*th July* 1882.

I AM directed to forward for the inspection of the Chamber of Commerce the accompanying cutting from a pocket handkerchief impressed with designs of Government Currency Notes, together with a copy of a letter from the Inspector-General of Police, suggesting that steps should be taken to stop the manufacture and the importation into India of handkerchiefs of this description.

No. 8282 dated the 16th May 1882.

It will be seen from the Inspector-General's letter that the impressions on these handkerchiefs have been successfully used for fraudulent purposes in different parts of the country. The Lieutenant-Governor thinks it quite possible that the pattern has been adopted with the object of cheating, and, even if this is not so, that large importations of these handkerchiefs would tend to increase fraudulent impositions upon the credulous and ignorant.

In now drawing the attention of the Chamber of Commerce to the matter, I am to point out the necessity which, in the opinion of the Lieutenant-Governor, appears to exist for prohibiting the import of such articles, and to request that the Chamber may be moved to favor Government with an expression of their views on the subject.

From the Inspector-General of Police, L. P. to Government of Bengal.

No. 8282, *Fort William, the* 16*th May* 1882.

I have the honor to bring to the notice of Government that there has lately been an importation of gaudy handkerchiefs on which there are imitations of chess-boards, playing-cards, and *Government Currency Notes*. Two cases have lately occurred in Calcutta in which these imitations of notes have been cut out of the handkerchiefs and palmed off on the ignorant public as genuine notes. I am also given to understand that there has been a similar case at Lahore.

It seems to me that steps should be taken to have the manufacture and importation of these handkerchiefs with imitations of currency notes stopped.

I enclose a specimen.

From Chamber to Government of Bengal.

Calcutta, 10*th August* 1882.

I am directed by the Committee of the Chamber of Commerce to acknowledge the receipt of your letter No. 2387 of the 13th ultimo, which, as well as the copy of letter from the Inspector-General of Police and the specimen of pocket handkerchief referred to have been circulated to members of the Chamber.

The Committee desire me to say, in reply, that they fully endorse the opinion of his Honor the Lieutenant-Governor

that the importation of handkerchiefs impressed with designs of Government Currency Note should be peremptorily prohibited.

No. 4877.

Resolution by the Government of India, Department of Finance and Commerce.

READ—

A letter from the Government of Bengal to the Government of India in the Home Department, No. 872, dated the 31st May 1882, submitting for orders a proposal by the Inspector-General of Police to prohibit the manufacture and importation of handkerchiefs impressed with designs in imitation of Government Currency Notes.

READ—

A letter to the Government of Bengal, No. 2071, dated the 30th June 1882, requesting that Government to point out to the Chamber of Commerce at Calcutta the fradulent use that can be made of these handkerchiefs, and the necessity which appears to exist for prohibiting the import of such articles, and to ask for the opinion of the Chamber on the subject.

READ—

An endorsement from the Government of Bengal, No. 2293, dated the 17th August 1882, submitting the opinion of the Bengal Chamber of Commerce "that the importation of handkerchiefs impressed with designs of Government Currency Notes should be peremptorily prohibited,"

with an intimation that the Honourable the Lieutenant-Governor concurs in this opinion.

Resolution.—In May last the Inspector-General of Police, Bengal, brought to the notice of the Local Government that there had recently been an importation of gaudy coloured cotton goods on which, among other things, designs in imitation of Government Currency Notes had been impressed, and that two of these designs had been cut out and palmed off on ignorant people in Calcutta as genuine notes. It also appears that similar goods have been imported into the Bombay Presidency and other parts of India, and it is believed that designs cut from them have been used for dishonest purposes outside the presidency towns. The Governor-General in Council observes that, while there is doubtless no fraudulent intention on the part of the manufacturers and importers of these goods, there is evidence that the Currency Note forms impressed on them have been used in this country for fraudulent purposes. The designs could not impose upon any person who had experience in dealing with Currency Notes; but as the poorer and more ignorant classes of the community are very easily deceived in matters of this nature, it appears to His Excellency in Council that there is substantial risk of these imitations of Currency Notes being used to a considerable extent for purposes of deception; any such frauds might also seriously affect the confidence of the poorer classes in Currency Notes; and His Excellency in Council is therefore of opinion that it is necessary in the interests of the public to prohibit the importation of the goods in question. This prohibition if carried into effect at once would, however, render valueless

goods which have been manufactured in good faith, and accordingly His Excellency in Council is pleased to decide that the prohibition shall not be brought into operation until 1st March 1883. It has also been discovered that goods of a similar nature have been imported with designs impressed upon them in imitation of Government Promissory Notes, and the prohibition will, therefore, be made to include all such goods as well as any goods on which designs in imitation of Government of India Stock Notes may be impressed.

2. The Governor-General in Council would under ordinary circumstances have preferred that effect should be given to the prohibition by means of legislation; but legislation on the subject, if framed in general terms and not made applicable solely to the particular case now under consideration, would necessarily have a wider effect than the necessities of the case require; and His Excellency in Council has, therefore, decided to use the powers conferred on him by section 19 of the Sea Customs Act, 1887, for the purpose of prohibiting the import of the goods in question, and accordingly directs the publication of the annexed notification.

Ordered: that this Resolution be published in the *Gazette for India* for general information, and that it be communicated, with a copy of the Notification, to the several Local Governments and Administrations for information and guidance.

No. 4878.

In exercise of the powers conferred by section 19 of the Sea Customs Act, 1878, the Governor-General in Council

is pleased to prohibit the importation into ports in British India of cotton goods impressed with designs in imitation of Currency Notes, Promissory Notes, or Stock Notes of the Government of India. This order shall come into force from the 1st of March 1883.

D. M. BARBOUR,
Secy. to the Govt. of India.

GOVERNMENT RESOLUTION ON THE PORT COMMISSIONERS' ADMINISTRATION REPORT FOR 1881-82.

READ—

The Administration Report of the Commissioners for making improvements in the Port of Calcutta for the year 1881-82.

THE report, which has reached the Lieutenant-Governor more than a month after the prescribed date, commences as usual with a statement of the actual financial condition of the Port Trust. The anticipations expressed in the Lieutenant-Governor's Resolution on the report for the year 1880-81, that Act I (B. C.) of 1881 would remove the objections which had been entertained by capitalists to lending money to the Commissioners have been fully realized, and the Commissioners found no difficulty in raising a loan of ten lakhs of rupees at the commencement of the year under review. Against the addition thus made to the liabilities of the Port Trust is to be set a reduction of Rs. 90,734 in the consolidated debt

owing to Government. The total amounts of debt at the commencement and close of the year were as follow :—

	31st March 1881. Rs.		31st March 1882. Rs.
Consolidated debt due to Government (repayable)	52,53,564		51,62,830
Port book debt (not repayable)...	17,65,000		Rs, 17,65,000
Due on debenture loan of 1881...	.....	10,00,000	
Less amount set aside for Sinking Fund.	... ..	10,000	9,90,000
	70,18,564		79,17,830

2. The property owned by the Port Commissioners at the close of the year, estimated as usual with reference to the amount actually expended on works and in the formation of reserve funds, but exclusive of the value of the foreshore and Strand Bank lands made over to the Trust by Government, is valued at Rs. 1,34,33,606, thus :—

	Rs.
Jetties and appliances for sea-going vessels ...	51,34,974
Inland Vessels' Wharves, Landing-stages, Tramway, &c. &c.	55,33,947
Moorings Anchor vessels, Harbour Master's boats and steamers	20,59,308
Investment for Jetty Reserve Fund	89,933
Ditto Insurance Fund	41,094
Ditto Port Insurance Fund	3,64,250
Ditto Depreciation Fund	1,99,995
Ditto Debenture Loan Sinking Fund ...	10,105
Total ...	1,34,33,606

The value of the Trust property at the close of the year 1880-81 having been Rs. 1,27,36,752, the total increase amounts to Rs. 6,86,854.

The above expenditure has been met from the following sources:—

	Rs.	Rs.
By loan from Government (repayable) ...	60,25,100	
Ditto less unexpended balance ...	38,704	
		59,86,396
Ditto ditto (not repayable) ...		17,65,000
Ditto on debentures ...	10,00,000	
Ditto less unexpended balance ...	3,20,523	
		6,79,477
Contribution from Government towards purchase of land		74,584
Ditto ditto landing stage at Prinsep's Ghât		10,000
Ditto ditto River Police block ...		7,150
From sale of surplus land...		4,07,817
From revenue derived from works since formation of Trust	46,44,182	
Less amount written off on account of Press-house being burnt down ...	1,41,000	
		45,03,182
Total ...		1,34,33,606

3. Of a total expenditure of Rs. 8,77,591 on new works, Rs. 4,10,232 or nearly one-half, was incurred for the purchase of the site of the East Indian Railway Company's premises at Armenian Ghât. Of the remainder Rs. 77,956 were spent on the Jetties, mainly in the extension of the embankment and the removal of sheds Nos. 2 and 3 to the Jetty head; Rs. 37,075 on the Inland Vessels' Wharves, the principal item being the construction, at a cost of Rs. 21,609, of a new bathing Ghât at Mullick's Ghât; Rs. 40,983 on the Tramway, chiefly in the purchase of new rolling-stock; Rs. 1,06,668

on the Howrah foreshore road, and Rs. 86,190 on the extension of the Port moorings. Miscellaneous expenditure, including the cost of a new anchor vessel, the renewal and repairs of hopper barges, and the construction of a new cargo shed at Armenian Ghât and of a house at Hastings for the Harbour Master, amounted to Rs. 1,18,289. With the exception of the removal of Nos. 3 and 4 import sheds to the Jetty heads, whereby an increase of two has been effected in the number of sheds available to the public into which cargo can be delivered without trollies directly from the ships, no important improvements in the port were completed during the year. The following works, however, were taken in hand :—An extension of the Jetty embankment from the end of No. 5 Jetty to the north end of No. 6 Jetty, a distance of 483 lineal feet; the construction of the first block of a row of warehouses at No. 1 Jetty; the enclosure of the open cargo shed at No. 8 Jetty; and the construction of a shed at Armenian Ghât, of Jetties on Temple's wharf and of Tramway warehouses. Additional engines and boilers were ordered from England for the Hydraulic Crane pumping-house. The riverside Press-house, which was destroyed by fire during the year, has been partially reconstructed. The pregress made on the Howrah foreshore road has been slow, and it was found necessary at last to annul the agreement made with the original contractors and to put the work into other hands.

4. The net revenue from the Jetties amounted to Rs. 2,20,186 or Rs. 32,793 less than that realized in the previous year. The falling off was entirely due to increased expenditure. The total receipts amounted to

Rs. 7,68,047, (of which Rs. 6,68,529 or 87·04 per cent. were realized from imports) against Rs. 7,24,900 in 1880-81, showing an increase of gross income amounting to Rs. 43,147. Of this increase the proportion contributed by import and export trade were about ¼th and ¾ths respectively. The receipts from imports would have been considerably greater, but for a reduction in the charges made for landing piece-goods, twist, iron and other commodities. The expenditure which had been Rs. 4,71,921 in 1880-81, rose to Rs. 5,47,861 in the year under review. More than half of the excess, however, is explained as being "due to the contribution made from Jetty revenue towards the cost of maintenance of the River Survey, Lighting and Buoy Departments to make good the loss of revenue which this part of the port expenditure sustained by the reduction made in the year in the cost of pilotage and port dues." The remainder of the increase is due to the enhanced cost of establishment, to higher working expenses, and to renewals and repairs consequent on the increase of work at the Jetties. The proportion of expenditure to gross income for the last three years has been—1879-80, 69·8 per cent.; 1880-81, 65·1 per cent.; 1881-82, 71·3 per cent. The Jetties were used by 212 vessels, a number 19 in excess of that for 1880-81, and only 20 short of the large number which used the Jetties in the year of the Madras famine. But while in 1877-78 the gross tonnage of the vessels accommodated at the Jetties amounted to 355,634 tons, in the year under review it reached 361,636 tons, the average burthen of each vessel being in the former year 1,533, and in the latter 1,706 tons. Notwithstanding this increase, the work has been done with greater despatch than in

previous years, and for the first time since 1875-76, when 156 vessels only were accommodated, the average detention of each vessel has been under 10 days. The beneficial results of the shorter detention to the general public is seen in the fact that the average amount paid for the use of the Jetties was only Rs. 3,552 for each ship against Rs. 3,700 in 1880-81. The Lieutenant-Governor hopes that further substantial reductions will be found practicable; and that improved facilities for loading and unloading vessels may in some measure compensate for the want of the larger docking accommodation which other ports afford.

The floating 30-ton crane paid its way satisfactorily during the year, its earnings being Rs. 20,465, and the cost of its maintenance Rs. 14,787. It is believed that the crane is of considerable indirect benefit to the port, as but for it, the Commissioners are informed, ships would either refuse to bring out the heavy pieces of machinery now carried, or would charge greatly enhanced rates of freight for doing so.

5. The receipts and expenditure connected with the Inland Wharves both show a considerable increase during the year under review as compared with the previous year, in which the accounts of the Tramway were for the first time eliminated from the general wharf account, thus:—

	1880-81.	1881-82.
	Rs.	Rs.
Receipts	3,76,444	3,81,937
Expenditure	1,92,091	2,23,930
Excess of income over expenditure ...	1,84,353	1,58,007

The excess of expenditure in the year under review is accounted for by a contribution of Rs. 38,507 from this source towards the expenses of the River Survey, Lighting and Buoy Departments. Exclusive of this item, the receipts would have exceeded the expenditure by Rs. 1,96,514. The total amount realized from tolls on goods passing over the wharves was Rs. 3,72,993 against Rs. 3,70,568 in the previous year.

6. The whole of the available land on the Strand Bank was occupied throughout the year, and the receipts from this source were in consequence slightly in excess of those for previous years. Against the increase, however, which amounted to Rs. 5,501, an item of Rs. 25,000 appears on the expenditure side of the account, representing half the contribution made by the Port Commissioners towards the cost of the bridge over the East Indian Railway at Howrah. Leaving this sum out of account, the expenditure on the Strand Bank lands amounted to Rs. 86,559, showing an improvement of Rs. 2,259 as compared with the previous year. The net surplus revenue from these lands was Rs. 45,913. The Press-house belonging to the Commissioners, situated to the north of the Mayo Hospital, was destroyed by fire in February, but is now being re-built. It was insured for its full value, and the whole amount has been recovered.

7. The receipts from the Harbour Master's Department during the year show a considerable falling off as compared with those of 1880-81, and the net result, notwithstanding that the expenditure was less in the former year than the latter, was a decrease of revenue

amounting to Rs. 9,726. The figures for the past ten years are given below :—

	Income.	Expenditure.	Profit.
	Rs.	Rs.	Rs.
1872-73	5,43,020	3,95,168	1,47,852
1873-74	4,26,974	3,84,858	42,116
1874-75	4,25,390	4,19,923	5,467
1875-76	4,30,551	4,24,931	5,620
1876-77	4,69,290	4,23,566	45,724
1877-78	6,10,171	4,28,909	1,81,262
1878-79	5,80,184	3,98,106	1,82,078
1879-80	5,61,299	3,92,353	1,68,946
1880-81	4,93,644	4,63,514	30,130
1881-82	4,81,872	4,61,468	20,404

The decline in income from this source was due mainly to the increased demand for tonnage which caused ships to shorten their stay in the port as far as possible, so that "with a larger number of vessels entering and leaving, there were fewer vessels at any one time in harbour." This increased activity, which is in itself a cause for satisfaction, was not entirely a pecuniary loss to the port, as a part of the cost was met by larger receipts on account of extra work done in the department. The principal heads under which increased expenditure was incurred were salaries and repairs. The increase in salaries was due partly to a small increase to the salaries of the Assistant Harbour Masters, but chiefly to increased fees earned by officers of the department. The repairs required for the steam-launch *Vectis* amounted to Rs. 7,742, which accounted for almost the whole of the additional expenditure under this head. The charge on account of the depreciation fund Rs. 55,110, was less by Rs. 25,830 than it was in the previous year.

8. An idea of the expansion of the foreign trade of Calcutta during the last 20 years may be gathered from

a perusal of the following table taken from the report, which shows the numbers of vessels entering and quitting the port in each year, and compares the total tonnage for the same period :—

Years.	Arrivals.						Departures.					
	Number.			Gross tonnage.			Number.			Gross tonnage.		
	Steamers.	Sailing vessels.	Total.	Steamers.	Sailing vessels.	Total.	Steamers.	Sailing vessels.	Total.	Steamers.	Sailing vessels.	Total.
1861-62	89	803	892	.....	.....	668,311	...	...	901	.....	.....	669,321
1862-63	118	816	934	.....	.....	699,040	...	...	936	.....	.....	768,078
1863-64	173	967	1,140	.....	.....	933,148	...	...	1,112	.....	.....	887,445
1864-65	187	1,019	1,206	.....	.....	997,756	...	...	1,697	.....	.....	917,549
1865-66	201	708	909	.....	.....	784,703	...	...	981	.....	.....	840,225
1866-67	175	599	774	.....	.....	682,848	...	...	774	.....	.....	680,573
1867-68	152	732	884	.....	.....	814,450	...	...	909	.....	.....	826,804
1868-69	208	679	887	.....	.....	839,823	...	...	878	.....	.....	809,328
1869-70	204	602	806	.....	.....	757,208	...	...	805	.....	.....	754,838
1870-71	259	672	931	327,960	666,431	994,391	251	687	938	319,315	680,345	999,660
1871-72	300	655	955	431,933	689,252	1,121,185	303	634	937	434,859	670,115	1,105,004
1872-73	338	615	953	516,055	630,294	1,146,349	328	628	956	503,773	634,197	1,137,970
1873-74	429	552	981	638,458	566,867	1,205,325	430	518	948	669,858	547,040	1,216,898
1874-75	454	473	927	789,816	490,788	1,280,604	466	435	901	808,680	465,186	1,273,866
1875-76	406	508	914	724,740	550,204	1,274,944	405	501	906	729,524	554,797	1,284,321
1876-77	552	609	1,171	987,323	709,378	1,696,701	536	577	1,113	958,254	632,996	1,591,250
1877-78	736	646	1,372	1,314,605	742,339	2,056,944	736	586	1,322	1,325,333	663,654	1,988,987
1878-79	489	478	967	898,932	531,857	1,430,789	507	493	1,000	926,956	554,029	1,480,985
1879-80	442	454	896	848,564	567,415	1,415,979	434	461	895	845,016	575,425	1,420,441
1880-81	506	478	984	1,009,052	570,317	1,579,868	510	505	1,015	1,014,433	616,788	1,631,271
1881-82	601	473	1,074	1,243,680	564,325	1,808,905	597	461	1,058	1,232,461	541,623	1,774,084

The trade of 1877-78 was abnormal in consequence of the Madras famine, but leaving that year out of account the year under review shows larger returns than any of previous years, and this is the more satisfactory, inasmuch as the rise has been gradual, and is not due to any sudden or unusual inflation of trade.

The great draught of the vessels now piloted with safety on the Hooghly has already been noticed in the Lieutenant-Governor's review of the report of the Port Officer. The following table given by the Port Commissioners, in which the vessels entering and quitting the port during the last three years are classified according to their gross tonnage, is of interest as showing the progressive increase which is taking place in the size of the ships now visiting the port.

Arrivals.

Years.	Steamers.										Sailing Vessels.									
	Under 500 tons.	500 to 1,000 tons.	1,000 to 1,500 tons.	1,500 to 2,000 tons.	2,000 to 2,500 tons.	2,500 to 3,000 tons.	3,000 to 3,500 tons.	3,500 to 4,000 tons.	Above 4,000 tons.	Total.	Under 500 tons.	500 to 1,000 tons.	1,000 to 1,500 tons.	1,500 to 2,000 tons.	2,000 to 2,500 tons.	2,500 to 3,000 tons.	3,000 to 3,500 tons.	3,500 to 4,000 tons.	Above 4,000 tons.	Total.
1879-80...	1	67	57	125	97	35	48	12	...	442	28	97	204	120	4	1	...	...	...	454
1880-81...	1	59	71	131	125	45	63	10	1	506	56	80	234	104	3	1	...	...	...	478
1881-82...	6	47	39	207	156	58	68	15	5	601	55	81	218	112	6	1	...	...	...	473

Departures.

1879-80...	...	64	56	121	93	37	50	13	...	434	27	96	217	116	4	1	...	...	...	461
1880-81...	...	59	69	136	129	46	61	9	1	510	54	78	249	122	3	1	...	...	...	505
1881-82...	...	48	40	206	152	57	68	15	5	597	60	80	215	100	5	1	...	...	...	461

The number of the steamers which came to Calcutta *viâ* the Suez Canal was 239 against 163 in 1880-81 and 171 in the famine year. The average burden of these vessels during the year under report was 2,544 tons.

9. Seven accidents happened during the year to ships while in charge of the Assistant Harbour Masters. None of these was of a very serious nature, but in two cases the ships had to put back and unload their cargo for repairs. The *Riga*, on the 20th September, in attempting to pass through the Hooghly Bridge under steam, fouled the hauling-out bar and knocked a hole in her bottom, and on the same day the *Scindia*, in dropping down to Garden Reach under steam, fouled No. 2 Prinsep's Ghat moorings, and did considerable damage to herself and to another vessel. In the former case the mishap was due to the steamer's engines not being under proper control, and in the latter to causes which were purely accidental. Altogether the casualties amounted to only ·65 on the number of vessels which visited the port—a figure which compares favourably with that for 1880-81 (·91).

10. The fire-engine *Hooghly* was got ready on thirteen occasions during the year, and her services were actually utilized on nine occasions—once to pump out the *Riga* in the Calcutta dock, once to pump out water from the 30-ton crane, and seven times in consequence of fires which were unusually numerous during the year. A fire which broke out on board the *Ellen Stuart* on the 27th December was put out, but the vessel was wrecked and her iron hull was cracked. The *County of Peebles*, loaded with

Jute, caught fire on the 6th February. The vessel was saved, but the whole cargo was damaged by fire and water. On the 7th March the cargo of the American ship *Valiant* was ignited by some unknown cause. Both the vessel and the cargo were much damaged, and the former was abandoned ; but it was afterwards found possible to tow her into moorings where her cargo was discharged. Three large fires also took place on shore. The Cossipore Jute Mills were partially destroyed on the 14th December, two large store-rooms being completely burnt. Owing to the distance of these mills from the river, no aid could be given by the floating engine. The Nasmyth Jute Mills, situated 200 yards from the river bank at Ghoosery, were wholly destroyed on the 21st February. The engine rendered what assistance was possible, but could only be employed for three hours owing to the shallowness of the water and the strength of the bore. The Riverside Press-house on the Strand Bank caught fire on the 24th February. The house was destroyed, but the outer godowns were saved. The engine was in attendance till the 7th March, when its services were required for the *Valiant*.

11. The operations of the dredger were more satisfactory than in the previous year, but the cost of dredging (Rs. 14·28 per 1,000 cubic feet,) though less than in 1880-81 (Rs. 24·93) is still very high. Altogether 1,541,500 cubic feet were dredged as against 1,067,500 cubic feet in the previous year, at a total cost of Rs. 31,611 against Rs. 33,443.

12. The Tramway forms on this occasion a separate section of the report. The income from, and expendi-

ture on, it for the last three years are compared below :—

Year.	Income.	Expenditure.	Profit.
	Rs.	Rs.	Rs.
1879-80	1,34,901	1,06,365	28,536
1880-81	1,12,026	81,469	30,557
1881-82	1,35,812	97,672	38,140

The great increase which has taken place in the past five years in the traffic passing over the Tramway is shown in the following table :—

	1881-82.	1880-81.	1879-80.	1878-79.	1877-78.
Through Traffic—					
Number of wagons arrived inward loaded	18,591	15,393	16,220	9,302	8,986
Ditto forwarded outward „	10,036	8,453	10,062	6,267	1,314
Total tons of goods received and despatched	188,030	159,805	157,014	92,388	81,767
Local Traffic—					
Total number of wagons loaded and despatched	11,448	9,481	7,632	2,239	Nil.

Up to the year 1879-80 the receipts shown under this head included the amount paid by despatchers and consignees of goods for loading and unloading wagons which have now, as mentioned in paragraph 6 of the Lieutenant-Governor's Resolution of last year, been handed over to the Eastern Bengal Railway. In consequence of the large extension of traffic, it has been found necessary to undertake the construction of 8,000 lineal feet of additional lines and sidings, to provide more godown accommodation, and to order 40 new wagons and 2 new locomotive engines from England.

13. The income from, and expenditure on, the River Survey, Lighting and Buoying establishments of the Hooghly, which were made over to the Port Commissioners on the 1st November 1881, are shewn below :—

Income.	Rs.
Receipts from port dues	1,15,024
Sale of condemned stores	5,892
Proportion of rent of head office	217
Miscellaneous	424
	1,21,557
Expenditure.	
Salaries	60,529
Proportion of salaries—control	3,695
Repairs	36,891
Working expenses	44,380
Charges for instruments	2,261
	1,47,756

The excess of expenditure over receipts actually amounted to Rs. 26,199. To meet the estimated deficit, a sum of Rs. 50,000 was provided in the budget in equal shares from the surplus revenue of the Jetties and Inland Wharves. The Survey, Lighting and Buoying Departments, therefore, closed the year with a nominal balance of Rs. 23,801 in their favour. The port dues, which were levied at the rate of 3 annas a ton until the close of the year, have now been reduced to 1 anna, and the deficit which will be caused in the accounts of the port approaches will be met by contributions from other departments. The policy of devoting any surplus of income to a reduction of charges, rather than to defraying the expenses of permanent improvements, was strongly urged upon the Commis-

sioners by the late Lieutenant-Governor. The soundness and justice of this policy is, in Mr. Rivers Thompson's opinion, not open to doubt. Owing to the many natural obstacles to navigation presented by the Hooghly river, the cost to ships of visiting Calcutta can never be low, and, therefore, in the interests of the port, it is absolutely essential, in view of the increased facilities for traffic now offered by railways, and of the comparative shortness of the voyage between Europe and Western India, that Calcutta should be relieved of any charges which can possibly be avoided. Satisfaction has more than once been expressed by Government at the acceptance of this view by the Commissioners. In July 1881 the Commissioners expressed their willingness to contribute a sum equivalent to a port due of 2 annas a ton to enable Government to effect a reduction of 15 per cent. in the pilotage fees, and this reduction was effected from the 1st August following. A reduction of 1 anna in the then port due of 4 annas a ton, was made with effect from the 1st October, and from the commencement of the current year the dues have been levied, as already mentioned, at the rate of 1 anna a ton. Reductions were also made in the Jetty charges during the year under review, and the charges upon piece-goods and twist have been considerably lowered since the 1st April 1882. In the words of the Commissioners "the concessions made in this direction of reduced charges have in effect taken off within 12 months five annas per ton from the charges formerly paid by shipping, and within the last few years one-third of the total charges paid by piece-goods, besides making other reductions in import and export goods of smaller importance."

14. The transfer of the port approaches from the Port Officer to the Port Commissioners was carried out on the 1st November 1881, in accordance with the scheme of which a sketch was given in paragraph 15 of the Lieutenant-Governor's Resolution on the Port Commissioners' report of last year. The Commissioners were appointed Conservators of the port approaches, and they have placed the work, connected with this branch of their duties, in the immediate charge of navigating Lieutenant E. W. Petley, R.N., as Deputy Conservator, whose services have, with the consent of the Admiralty, been placed at the disposal of the Commissioners for this purpose by the Government of India. A report by Lieutenant Petley regarding the port approaches forms an appendix to the report, but does not call for any special notice from Government in this place, the matters dealt with, though important, being for the most part of a technical character and without general interest.

15. With a view to providing increased facilities for warehousing goods to exporters and importers, the Commissioners had under their consideration for some time a proposal for the purchase of the Bonded Warehouses, but it was ultimately decided that it would be more expedient to build an entirely new set of warehouses. This scheme was opposed by the Municipal Commissioners, the British Indian Association, and other public and private bodies. The opposition was based mainly on two grounds —the interference with private trade; and a supposed pledge by Lord Dalhousie that high buildings should not be erected on the Strand Bank lands. Having consulted the law officers of Government, the Lieutenant-Governor was satisfied that no legal objections existed to the pro-

posed scheme, the advantages of which to the general public will far outweigh the inconvenience caused to the owners of private warehouses by the competition of the Commissioners. The pledge said to have been given by Lord Dalhousie has been misinterpreted, and Mr. Rivers Thompson believes that, in securing the cleanliness and good order of the Strand Bank lands and turning them to the best advantage in the general interests, he is carrying out fully the intentions of that Governor-General. The scheme has therefore been sanctioned.

16. A further scheme of a somewhat similar nature, for the erection of a tea warehouse on the site vacated by the East Indian Railway at Armenian Ghât, has been under discussion throughout the year. The advantages of the proposal commended it to favourable consideration, but a portion of the scheme consisted in providing "facilities not only for receiving and storing tea, but also for the sale and sampling of that commodity," a provision which the Advocate-General has ruled to be beyond the legal scope of the Commissioners' powers. The proposal has therefore been negatived in its present form, but with some modification of the original intention it might be adopted.

17. During the year an agreement was arrived at for the long proposed transfer of the Chandpal Ghât pumping station to the Port Commissioners in exchange for Mullick's Ghât which has been made over to the Municipal Commissioners as a pumping station. The Port Commissioners also pay to the Municipality a sum of Rs. 1,00,731 towards the expenses of the removal of the pump-

ing engine. The Chandpal Ghât station will now be converted into a landing wharf. A further exchange of land between the Municipality and the Port Trust, with a view to putting a stop to the obstruction now caused to the public road by the traffic to No. 8 Jetty was negatived during the year by the Municipal Commissioners, but the matter is believed to be still under discussion, and it is hoped that some satisfactory conclusion may be arrived at, as there can be no doubt as to the impediment to general traffic along the Strand road now offered by the large number of carts going to and from the Jetties.

18. With a view to further facilitating the delivery and shipment of goods through the Jetties, it has been resolved, experimentally, to extend the number of hours for which the Jetty gates are to be opened without payment of fees. So far as the extra cost of this arrangement falls on the Customs Department it will be defrayed by Government.

19. The Lieutenant-Governor observes with satisfaction that it has not yet been found necessary to take any action under Act I (B. C.) of 1881 in order to prohibit, by a port rule, the exposure of seamen to the sun. Notices are distributed on arrival to all masters of ships regarding the danger of this practice, and the number of cases of sunstroke among sailors has greatly decreased. Masters are at the same time warned of the evil consequences of allowing their men to bathe alongside of vessels and to sleep without proper protection from damp.

20. The introduction of a new set of storm-signals has been sanctioned since the close of the year. These sig-

nals were proposed by the Meteorological Observer for the purpose of distinguishing between the more dangerous class of cyclones usually accompanied by a storm-wave, and the dangerous, but less destructive, cyclonic storms.

21. The thanks of the Lieutenant-Governor are due to the Commissioners for their successful management of the affairs of the Port Trust, the interest taken by them in its welfare having again been shewn by their regular attendance at the 29 meetings held during the year. The office of Chairman has been most efficiently filled throughout the year by Mr. Reynolds, and the duties of Vice-Chairman have been satisfactorily performed by Mr. D. Scott, who succeeded Mr. Duff Bruce shortly after the commencement of the year.

By order of the Lieutenant-Governor of Bengal,

A. P. MACDONNEL,

Offg. Secy. to the Government of Bengal.

No. 97.

COPY, with copy of the Report, forwarded to the Secretary to the Bengal Chamber of Commerce, for the information of the Chamber.

By order of the Lieutenant-Governor of Bengal,

C. S. BAYLEY,

Off. Under-Secretary to the Govt. of Bengal.

CALCUTTA,
The 12th September 1882.

GOVERNMENT RESOLUTION ON THE PORT OFFICER'S REPORT FOR 1881-82.

Calcutta, the 15th September 1882.

RESOLUTION.

READ—

The Annual Report of the Port Officer for the year 1881-82.

The report is submitted by Lieutenant Stiffe, who was Port Officer throughout the year, with the exception of three months, during which Lieutenant Warden, the Assistant Port Officer, officiated for him. Lieutenant Warden was transferred to Rangoon just before the close of the year, and the appointment of Assistant Port Officer has not since been filled up. Considerable changes took place during the year in the duties performed by the Port Officer. The River Survey Department, the care of the light-vessels and light-houses, and of the houses of refuge, the Wreck and Anchor Department, the Buoy-vessel and Buoy Department, and the Tidal Semaphores and guages were transferred to the Port Commissioners on the 1st November, and the Port Officer subsequently took charge of the office of Shipping Master, which had formerly been amalgamated with that of the Collector of Customs. These changes have not yet been in force sufficiently long to enable their effect to be determined with certainty, but there is no reason to believe that the result will be other than satisfactory.

2. Two deaths among the Mate Pilots reduced the total number of Pilots, which at the commencement of the year 1881-82 stood at 63, to 61 before its close. During the current year two Leadsman Apprentices have qualified and have been promoted to the rank of Mate Pilot, so that the number is now the same as it was on the 1st April 1881. One Leadsman Apprentice was removed from the service during the year for failure to pass the prescribed examinations, and one recruit was admitted. The Port Officer reports favourably of the conduct of the Leadsman Apprentices, and considers the present system of nomination from the training ships at home productive of good results.

3. The total number of arrivals in the port was 1,074 and of departures 1,058, being in excess of any previous year excepting 1876-77 and 1877-78, when the trade of the port was abnormally large owing to the Madras famine. The average tonnage of the ships arriving was 1,683 and that of ships leaving 1,676. The increase in numbers was entirely among steamers, of which 601 entered and 597 left the port, against 506 and 510 in the previous year. The numbers of incoming and outgoing sailing vessels fell from 478 and 505 to 473 and 461 respectively. The subject of the increase in the number of steamers and the decrease in the number of sailing vessels has been considered in the review of the Port Commissioners' report, in which it is dealt with in greater detail than in that now under consideration. The figures cited above do not include 21 Government vessels, and 189 arrivals, and 191

departures of vessels for the Orissa ports. The Port Officer has appended to his report some interesting diagrams indicating the number and tonnage of the vessels piloted, and the number of accidents which have taken place, for the last 25 years. These diagrams show very conclusively that the Pilot Service has proved fully equal to the more difficult task now falling to its lot in consequence of the great increase in the size of vessels visiting the port. This will be apparent from the fact that the average tonnage of the steamers which visited the port in the year 1872 was little over 1,500 tons, and that of the sailing vessels 1,050 tons, while the average of steamers is now 2,050 tons and of sailing vessels 1,200 tons. It may be added that the proportion of accidents to traffic, which in 1868 rose to 5·55 per cent, was 4·4 per cent. in 1872, and has now fallen to 2·1. The Port Officer is therefore justified in stating that as "five steamers and one sailing vessel of the great draught of 25 and 26 feet proceeded safely down the river during the year, it would appear that the navigable channels of the Hooghly do not show any practicable signs of deterioration."

4. The following table shows the comparative numbers of the vessels of deep draught piloted in the Hooghly for the last two years, and serves to exemplify the transition which is taking place from sailing vessels to steamers, and from vessels of light to vessels of heavier tonnage :—

	21-22 feet.				22-23 feet.				23-24 feet.				24-25 feet.				25-26 feet				TOTAL.			
	1880-81.		1881-82.		1880-81.		1881-82.		1880-81.		1881-82.		1880-81.		1881-82.		1880-81.		1881-82		1880-81.		18811-82	
	In.	Out.	In.	Out.	In.	Out.	In.	Out.	In.	Out.	In.	Out.	In	Out.	In.	Out.	In.	Out.	In.	Out	In.	Out.	In.	Out.
Steamers ...	27	43	35	84	21	86	22	98	8	49	6	86	...	23	...	33	...	4	...	5	56	205	63	306
Sailing vessels	45	130	59	105	21	57	24	60	2	16	5	13	...	6	1	5	...	...	...	1	68	209	89	184
Total ...	72	173	94	189	42	143	46	158	10	65	11	99	...	29	1	38	...	4	...	6	124	414	152	490

Notwithstanding the changes in the distribution of tonnage among the various grades of Pilots, which were introduced last year with a view to raise somewhat the earnings of the junior members of the service, it is remarkable that the average monthly number of ships piloted by each Branch Pilot was 5·48 as against 4·72 in the previous year. As the Port Officer observes, the increase is due to the rapid rise which has taken place in the size of vessels visiting the port rather than to the increase in their numbers. The average number of ships piloted by the Senior Master Pilots rose from 2·88 to 3·05, while the average number falling to the lot of the nine Junior Masters was only 2·7 a month. The Mates were better off in this respect, and averaged 3·4 ships each.

5. The Lieutenant-Governor observes with satisfaction that the increase in the number of ships was accompanied by a large decrease (from 46 to 33) in the number of groundings. In only one case was an injury received. In six instances the Pilots in charge were found to be to blame, but in one case only was it found necessary to inflict a more severe punishment than a reprimand. The number of collisions rose from 7 to 12. In half the cases no damage at all was done; in five, one or both vessels received some injury; and in the sixth, a boat, which was itself to blame for the result, was sunk. One case only was due to want of care on the part of the Pilot. Taking groundings and collisions together, the percentage of accidents to the number of vessels in the port was only 2·1 as against 2·45 and 2·65 in the preceding years. The Lieutenant-Governor fully agrees in the commendation bestowed by the Port Officer on the Hooghly Pilots as a body for their

skill in navigating vessels of all kinds in the exceedingly difficult and intricate channels of the Hooghly. It is satisfactory also to learn that the tone of the service is good, and, in the opinion of the Port Officer, rising.

6. Courts of enquiry were held in several cases to investigate the conduct of Pilots and accidents on the river and in the port, but the proceedings of one only—namely, the enquiry into the causes of the loss of the *Ghattal*—are of general interest. The *Ghattal* was a vessel carrying passengers between the place of that name in Midnapore and Calcutta. While endeavouring to pass through the Hooghly Bridge before daylight on the morning of the 21st February 1882, the *Ghattal* came into collision with one of the pontoons of the bridge and sank. Many of the passengers were saved, but it is impossible to say what loss of life occurred, as the number on board was not known with exactness, and it is uncertain how many reached land safely. In order to guard against similar accidents, a port rule has been passed prohibiting vessels from being under weigh between sunset and sunrise between Hastings Bridge and Ahiritola Ghât. The question of regulating the traffic of these small passenger-carrying steamers, to which, as they do not go to sea, the Provisions of the Native Passenger Ship's Act do not apply, is now under the consideration of the Lieutenant-Governor.

7. The services of the *Undaunted* were, as in the previous year, made available when necessary for the use of this Government by the Government of India until the 1st September 1881, when she was transferred permanently to the Bengal Marine. Of the three pilot brigs one

the *Chinsurah*, has been condemned, and a new brig has been ordered from England in her place. It is hoped that the new brig may arrive by the month of January or February next. The *Coleroon* and *Cassandra* are both in good order.

8. The number of certificates of survey granted to inland steamers during the year amounted to 193, against 170 in 1880-81. The number of permits granted to small coasting vessels of between 100 and 200 tons burthen fell from 26 to 22. Three vessels were again registered under the English Merchant Shipping Act of 1854, and two vessels under Act X of 1841. Under the Native Passenger Ships Act, 73A and 80B certificates were issued, showing a slight increase in the former, and a slight decrease in the latter, as compared with the previous year. For certificates of competency, 80 candidates were examined, of whom 58 were successful. Of the 22 failures, twelve were among 26 candidates for certificates as engine-drivers, and four among 7 candidates for second-class engineer's certificates. Three candidates appeared for certificates of competency as first-class engineers of inland steamers, of whom none passed. Five licenses were renewed to pilots of native vessels, who, however, only piloted five vessels between them.

9. The only changes of importance which took place during the year have been already noticed. A Committee, of which the Port Officer and Assistant Port Officer were members, sat by order of the Government of India to consider the question of light-house and light-vessel

maintenance in India. The Government of India sanctioned the adoption of a code of signals for pilots, designed by Mr. Elson, a Licensed Master Pilot.

10. The thanks of Government are due to the Port Officer for his efficient performance of his duties throughout the year.

By order of the Lieutenant-Governor in Bengal,

A. P. MACDONELL,

Offg. Secretary to the Govt. of Bengal.

No. 1401.

Copy of the Report and of this Resolution forwarded to the Bengal Chamber of Commerce for information.

By order of the Government of Bengal,

C. S. BAYLEY,

Offg. Under-Secretary to the Govt. of Bengal.

CALCUTTA,
The 15th September 1882.

SECRETARY OF STATE'S REPLY TO THE MEMORIAL AGAINST THE REDUCTION OF SALARIES OF PUISNE JUDGES OF THE HIGH COURT.

INDIA OFFICE:
London, 3rd August.

To

HIS EXCELLENCY THE MOST HONORABLE
THE GOVERNOR-GENERAL OF
INDIA IN COUNCIL.

Judicial.
No. 22.

MY LORD MARQUIS,—In my despatch of the 27th of April last, No. 13, I replied to Your Excellency's letters of the 6th, 13th and 27th February, Nos. 5, 8 and 11, relating to the assimilation of the salaries of the Puisne Judges of the High Court at Calcutta to those of the Judges in the other High Courts, and I expressed my inability to modify the orders contained in my despatch of the 3rd of February 1881, No. 7.

2. In a letter dated the 9th of May, No. 16, you forwarded a memorial from another member of the Bengal Civil Service, in precisely the same terms as those previously transmitted, which, therefore, calls for no special comment.

3. Your letter No. 15, of the same date, however, forwards a memorial on the same subject, signed on behalf of the Calcutta Bar, the Bengal Chamber of Commerce, the Trades' Association of Calcutta, the British Indian Association, the National Mahomedan Association, and the Vakeels of the High Court, and accompanied

by a Minute, dated the 8th of September 1881, addressed to your Government by the Chief Justice of the High Court of Calcutta.

4. Although Your Excellency is well aware of the reasons which led Her Majesty's Government to issue the instructions that have drawn forth the protests, I think that a memorial representing so many important interests, calls for a somewhat fuller explanation than was given in my despatch of the 27th of April, of the reasons for the original orders being passed, and for my adherence to them.

5. In the summer of 1879, when the pressure on the finances of India compelled the Government to curtail its expenditure in every possible manner, the attention of Parliament was directed, among other matters, to the reduction of the Home charges, and, on the part of the Secretary of State in Council, Mr. Stanhope gave an assurance to the House of Commons that no opportunity should be lost of reducing them as much as possible. Accordingly, Viscount Cranbrook appointed a special Committee, comprising certain Members of the Council of India, and presided over by one of the Under-Secretaries of State, to consider what reduction appeared feasible in the charges borne upon the Home Accounts, and in relation to appointments to offices in India made by the Secretary of State.

6. In their first report the Committee recommended the reduction of the passage and outfit allowances granted to many high officers, including the Viceroy, the Governors of Madras and Bombay, the Members of Council

the Commanders-in-Chief, the Bishops, the Chief Justices at Madras, Bombay, and Allahabad, and the Puisne Judges, and the necessary Act of Parliament was passed for effecting such of these reductions as required legislative sanction.

7. The second report of the Committee dealt with the salaries of the same high officers, and changes were recommended in those of the Governors of Madras and Bombay, of Members of Council appointed from England, of the Commanders-in-Chief at Madras and Bombay, and of the Puisne Judges.

8. The Act of Parliament passed in 1861 for the establishment of the High Courts empowers the Secretary of State in Council to fix the salaries of the Judges of the High Courts, and from time to time to alter them. It was, however, thought by Lord Cranbrook to be desirable that the opinion of the Government of India should be requested as to the proposed alteration of judicial salaries, and accordingly that Government was consulted on the question, whether in future the Puisne Judges of the High Court of Calcutta should receive a higher salary than the Puisne Judges of the High Courts of Madras, Bombay, and the North-Western Provinces. The Government of India, in reply, stated that they were divided in opinion, the majority considering that the assimilation should not be made, and the minority holding that there was no longer any reason for the difference. They therefore added that they left the question to the decision of the Secretary of State. Thereupon I carefully reconsidered the whole subject in Council,

and I determined on upholding the view arrived at by the Special Committee and by Lord Cranbrook.

9. It is, I hope, unnecessary for me to state that my predecessor cannot have intended, nor assuredly did I intend, to throw any slur whatever on the High Court of Calcutta. There are, it must be obvious, grave antecedent objections to giving different remunerations to officers of equal dignity performing the same or very similar duties in various parts of India. And in the case of the Judges of the High Court, the inequality was the more striking on account of the great assimilation of Indian law and procedure which has been effected by the abundant Indian legislation of recent years. I cannot admit, with the memoralists, that equality of salaries between the High Courts has any tendency to lead to the appointment of an inferior class of Judges, and to imperil the efficient administration of justice. If I were to defer to such an argument, I should cast, by implication, an unmerited slight on the gentlemen who have accepted appointments in the High Courts other than that at Calcutta. In this view I may observe that the only Chief Justice of Calcutta who has, since the assumption of the Government by Her Majesty, been appointed from the Bench in India, began his career in that country as a Puisne Judge at Bombay. The reasoning of the memoralists might, in fact, be applied with equal propriety to the administration of the Government generally, of the Army, and of Ecclesiastical matters, since, as I have already stated, the same orders which affect the Puisne Judges affect also the salary or outfit of Governors

and Members of Council, of the Commanders-in-Chief, and of the Bishops.

10. I have further to observe that a considerable portion of the Puisne Judges of the High Court are appointed by Her Majesty from the Bar in England, and that nothing whatever has occurred here which could lead me to suppose that any difficulty would be experienced in obtaining for the High Court of Calcutta Barristers of equal efficiency with those who have served on the Bench of late years. I have every reason to believe that the salaries and pensions of High Court Judges on the scale of Madras and Bombay are regarded in this country as very liberal, and they are certainly in excess of those offered for judicial service in other dependencies or colonies of Her Majesty, even in those which are situated within the tropics.

11. The assimilation of salaries is also complained of, as interfering with the expectations of those Covenanted Civil Servants in Bengal who, not having yet been appointed to the Calcutta High Court, have selected the Judicial branch of the Service, and who therefore claim a species of vested interest in the maintenance of the higher salaries. I have already informed Your Excellency that any interest which can reasonably be regarded as vested—as, for example, the expectation of a civil servant who has temporarily officiated in the High Court—ought to entitle him to the older salary if he be appointed to the Bench by the Crown. But I am of opinion that the mere fact of having selected the Judicial Service cannot give any claim except to the

salary of a Puisne Judge, as it is fixed at the moment of appointment to the High Court. The argument to the contrary is of much wider reach than those who employ it appear to suppose. Very important proposals for judicial reform in Bengal have been under dicussion of late years between the Government of India and Her Majesty's Government. Any one of them would, in my judgment, entail some reduction in the number of civil servants appointed to the High Court, and would therefore interfere with expectancies more than any equalization of salaries could do. It is impossible, therefore, for me to admit the cogency of reasoning which, if allowed, might either arrest judicial reform, or defer it till every one who had an expectation, however remote, of a seat on the Bench of the High Court had passed out of the Civil Service of Bengal.

12. It has been already stated to Your Excellency that the exact salary of the Indian Puisne Judges has not yet been finally fixed by me. I think it, however, expedient to explain the manner in which the amount of salary named in certain Despatches was arrived at, namely, Rs. 43,200 a year. It is provided by the law that not less than one-third of the Judges in each of the High Courts shall be selected from the Covenanted Civil Service, and in practice that proportion is exceeded. Under the regulations such Judges contributed 4 per cent. on their salaries towards a provision for their pensions as Civil Servants; though, equally with the Barrister Judges who made no such contribution, they were entitled to pensions in accordance with the rules under the High Courts Act. Thus it happened, that one-half of the Puisne Judges at Madras, Bombay, and Allahabad, receiv-

ed salaries of Rs. 45,000, while the other half drew only Rs. 43,200, the whole being entitled to similar rates of pension after similar periods of service on the Bench. It was, therefore, considered that the opportunity should be taken of placing all the European Puisne Judges on an equality ; and, as no reason existed for increasing the salary of the Civilian Judges, the rate of pay was fixed for all such Judges in all the High Courts at Rs. 43,200, no contribution for pension being required in future.

13. I propose to address Your Excellency separately on the subject of salary of the Native Judges of the High Courts.

14. I request that you will communicate a copy of this Despatch to the various memorialists, with an expression of the regret that Her Majesty's Government feel at being compelled to refuse a compliance with their request.

I have the honor to be,
MY LORD MARQUIS,
Your Lordship's most obedient, humble Servant,
HARTINGTON.

By order,
F. C. DAUKES,
Under-Secy. to the Government of India,

HOME DEPARTMENT,
(JUDICIAL);
Simla, Sepetmber 1882.

FUNDS OF THE CHAMBER.

Statement of the Funds of the Bengal Chamber of Commerce, from 1st May to 31st October 1882.

Office Rent	...	...	...	900	0	0	Cash in Bank of Bengal on 30th April 1882	400	8	2
Establishment	...	...	...	5,451	0	0	Government Securities	15,000	0	0
Charges General	...	...	...	4,446	9	8				
Sundries	...	...	...	465	3	0	Rs.	15,400	8	2
		Rs.		11,262	12	8				
							Subscriptions ...	7,208	0	0
							Price Current and other Publications ...	2,826	10	0
Cash in Bank of Bengal		49	12	2			Interest on Government Securities	300	0	0
Reserve in Government Paper		15,000	0	0			Sundries	577	6	8
				15,049	12	2				10,912	0	8
		Rupees		26,312	8	10		Rupees		26,312	8	10

CALCUTTA,
31st October 1882.

E. E.

H. W. I. WOOD,
Secretary.

APPENDIX.

TONNAGE SCHEDULE for the PORT OF CALCUTTA, adopted at a Special General Meeting of the Bengal Chamber of Commerce, held on the 12th February 1872, with effect from 1st September 1872, except as regards the measurement of Cotton, Hemp, Jute, Jute Cuttings, Rhea, Safflower, and other articles similarly packed, which, under the Chamber's Resolution of 14th June 1872, had effect from 1st July 1873.

ARTICLES.	Cwt. per Ton Nett.	Cubic Feet per Ton.
Aloes, in bags and boxes	20	.....
Alum, in ditto	20	.....
Aniseed, in bags	8	.....
Arrowroot, in cases	.....	50
Arsenic, in bags or cases	20	.....
Asafœtida, in bags and boxes ...	20	.....
Apparel, in boxes	.....	50
Bark, in bags	8	.....
Bees' Wax	20 gross.	
Barilla	20	.....
Betel-nut	20	.....
Books	.....	50
Borax	20	.....
Bran	14	.....
Brimstone	20	.....
Bullion	at per cent.	
Cake-lac, in bags	16	.....
Camphor, in cases	.....	50
Cardamoms, in robins	8	.....
„ boxes	.....	50
Cassia, in boxes	.....	50
„ bags	12	.....
Castor Seed	15	.....
Chillies (dry), in bags	8	.....
China Root, in bags	11	.....
„ boxes	.....	50
Chiretta	.....	50
Churrah	14	.....
Cigars	.....	50
Cloves, in bags	8	.....
„ boxes	.....	50
Coals	20	.....
Cochineal	.....	50
Coffee, in bags	18	.....
„ casks	16	.....

ARTICLES.	Cwt. per Ton Nett.	Cubic Feet per Ton.
Coral, rough	20	.....
Coir, loose and unscrewed	12	.....
Copras, or Cocoanut Kernel	14	.....
Coriander Seed	12	.....
Cotton	5 bales not exceeding	52
Cowries	20	.....
Cummin Seed	8	.....
„ Black	8	.....
Cutch, in bags	18	.....
Dates, wet	20	.....
„ dry	16	.....
Dholl	20	.....
Elephants' Teeth, in bulk	20	.....
Furniture	.....	50
Garlic and Onions	12	.....
Ginger	16	.....
Gram	20	.....
Gums, in cases	.....	50
Gunny Bags and Gunny Cloth	.....	50
Gunjah	.....	50
Hemp	5 bales not exceeding	52
Hides, Buffalo, or Cow, cured	14	.....
Hoofs, Horn Shavings and Tips	20	.....
Horns, Cow, Buffalo, or Deer	20	.....
India Rubber, in bags	16	.....
„ cases	.....	50
Indigo	.....	50
Iron	20	.....
Jute	5 bales not exceeding	52
Jute Cuttings	5 bales not exceeding	52
Lac Dye	.....	50
Lard	20 gross.	
Linseed	20	.....
Mace	.....	50
Machinery	20	.....
Metals	20	.....
Mathie Seed	18	.....
Mirabolams	16	.....
Molasses	2 puncheons or 4 hhds.	
Mother o'Pearl, in bags	20	.....
„ chests	20	.....
Munjeet	.....	50
Mustard or Rape Seed	20	.....
Niger Seed	20	.....
Nutmegs, in cases or casks	.....	50

ARTICLES.	Cwt. per Ton Nett.	Cubic Feet per Ton.
Nux Vomica	16	.....
Oats	16	.....
Oil, in cases	.....	50
„ casks	4 hhds. per chest.	
Opium		
Paddy	16	.....
Palmatine, in bags	16	.....
Peas	20	.....
Pepper, Long	12	.....
„ Black	14	.....
Planks and Deals	.....	50
Poppy Seed	20	.....
Putchuck	10	.....
Rags	.....	50
Raw Silk, in bales	10	.....
Rattans for dunnage	20	.....
Red Wood, ditto	20	.....
Rhea	5 bales not exceeding	52
Rice	20	.....
Rope, in coils	.....	50
„ Lines and Twines, in bundles ...	16	.....
Rum, in casks	2 puncheons or 4 hhds.	
Safflower	.....	50
Sago, in cases	.....	50
Sal-ammoniac, in bags	20	.....
„ boxes	20 gross.	
Saltpetre	20	.....
Salt	20	.....
Sapan Wood for dunnage	20	.....
Sealing Wax, in cases	.....	50
Seed-lac, in cases	.....	50
„ bags	16	.....
Senna	.....	50
Shells, rough, in bags	20	.....
Shell-lac, in cases	.....	50
„ bags	16	.....
Silk Chussum	.....	50
„ Waste	.....	50
Silk Piece-Goods	.....	50
Skins	14	.....
Soap, country, in cases	.....	50
„ bags	15	.....
„ bar	20	.....
Stick Lac, in cases	.....	50
„ bags	16	.....

ARTICLES.	Cwt. per Ton Nett.	Cubic Feet per Ton.
Sugar	20	.....
Tallow, in cases or casks	20	.....
Talc	20	.....
Tamarinds, in cases or casks ...	20	.....
Tapioca	.....	50
Tea	.....	50
Teel Seed	20	.....
Timber, round	.....	40
" squared	.....	50
Tincal	20	.....
Tobacco, in bales	16	.....
Tortoise Shells, in chests	.....	50
Turmeric	16	.....
Wheat	20	.....
Wool	.....	50

1. Goods in Casks or Cases to be calculated gross weight when paying freight by weight; and where freight is made payable on measurement, the measurement be taken on the Custom House wharf, or other shipping wharf within a radius of 5 miles from the Custom House, except in the case of Cotton, the measurement of which shall be taken at the Screw-house.

2. Measurement to be taken at largest part of the bale,—inside the lashing on one side, and outside on the other.

3. Jute, Jute Cuttings, Hemp, Cotton, Safflower, and other articles similarly packed, are screwed in bales varying from 300 to 400lbs.

4. The term "dead weight" shall be understood to mean the following articles:—Sugar, Saltpetre, Rice, Wheat, Gram, Dholl, Peas, Linseed, Rapeseed and all Metals.

☞ By a Resolution of a General Meeting of the Chamber held on the 31st May 1881, the Tonnage Schedule was forthwith amended as regards Jute, Jute Cuttings, Cotton, Hemp, and Rhea Fibre, the ton of each of which was altered from 50 cubic feet to 5 *bales not exceeding 52 cubic feet.*

H. W. I. WOOD,
Secretary.

SCHEDULE OF COMMISSION CHARGES

Revised and adopted by a Special General Meeting of the Bengal Chamber of Commerce, held on the 18th June 1861,—with effect from 1st January 1862.

1.	On the sale, purchase, or shipment of Bullion, Gold Dust or Coin	1	per cent.
2.	On the purchase (when in funds) or sale of Indigo, Raw Silk, Silk Piece-Goods, Opium, Pearls, Precious Stones, or Jewellery	2½	„
3.	On purchasing ditto when funds are provided by the Agent	5	„
4.	On the sale or purchase of all other goods—the commission in all cases to be charged upon the gross amount of sales, and in regard to purchases upon both cost and charges ...	5	„
5.	On returns for Consignments if made in produce ...	2½	„
6.	On returns of Consignments if in Bills, Bullion, or Treasure	1	„
7.	On accepting Bills against Consignments ...	1	„
8.	On the sale or purchase of Ships, Factories, Houses, Lands, and all property of a like description ...	2½	„
9.	On goods and treasure consigned, and all other property of any description referred to Agency for sale, whether advanced upon or otherwise, which shall afterwards be withdrawn; and on goods consigned for conditional delivery to others and so delivered, on invoice amount at 2*s.* per rupee	half com.	
10.	On making advances or procuring loans of money for commercial purposes, when the aggregate commission does not exceed 5 per cent. ...	2½	per cent
11.	On ordering, or receiving and delivering goods, or superintending the fulfilment of contracts, or on the shipment of goods, where no other commission is derived	2½	

12. On guaranteeing Bills, Bonds, or other engagements, and on becoming security for administration of Estates, or to Government for the disbursement of public money .. .. 2½ per cent.
13. On *del-credere*, or guaranteeing the due realization of sales ... . 2½ ,,
14. On the management of Estates for Executors or Administrators ... ... 2½ ,,
15. On chartering ships or engaging tonnage for constituents for vessels to proceed to outports for loading ... ... 2½ ,,
16. On advertising as the Agents for Owners or Commanders of ships for Cabin passengers, on the amount of passage money, whether the same shall pass through the Agent's hands or not ... 2½ ,,
17. On procuring freight for a ship by a shipping order or charter, or on procuring employment for a ship on monthly hire, or acting as Agents for owners, Captain, or Charterers of a vessel, upon the gross amount of freight, brokerage inclusive ... 5 ,,
18. On engaging Asiatic Emigrants for a ship to the Mauritius, the West Indies, or elsewhere, upon the gross amount of earnings 5
19. On engaging troops for a ship to Great Britain [illegible] elsewhere, on the gross amount of passa[illegible] for rank and file [illegible]
20. On realising inward freight [illegible] money or Cabin passage m[illegible] ... 2½ ,,
21. On landing [illegible] inward troops, Emigrant, in d[illegible] money ... ... 2½ ,,

[illegible] and re-shipping goods from any vessel [illegible]istress, or on landing and selling by auction damaged goods from any such vessel, and acting as Agent for the Master on behalf of all concerned, on the declared value of all such goods as may be re-shipped, and on the nett proceeds of all such goods as may be publicly sold ... 5 ,,

If Opium, Indigo, Raw Silk, or Silk Piece-Goods ... 2½ ,,
If Treasure, Precious Stones, or Jewellery ... 1 ,,

22. On effecting Insurances, whether on lives or property ... ... 2½ per cent.
23. On settling Insurance claims, losses, and averages of all classes, and on procuring returns of premium ... ... 2½ „
24. On drawing, purchasing, selling, or negotiating Bills of Exchange ... ... 1 „
25. On debts or other claims when a process at law or arbitration is incurred in claiming them ... 2½ „
    Or, if recovered by such means ... ... 5 „
26. On Bills of Exchange returned dishonored ... 1 „
27. On collecting House Rent ... ... 2½ „
28. On ship's Disbursements ... ... 2½ „
29. On realising Bottomry Bonds, or negotiating any loan on *respondentia* .. ... 2½ „
30. On granting Letters of Credit ... ... 1 „
31. On sale or purchase of Government Securities and Bank or other Joint Stock Shares, and on every exchange or transfer not by purchase from one class to another ... .. ½ „
32. On delivering up Government Securities and Bank or other Joint Stock Shares, on the market value. ½ „
33. On all amounts debited and credited within the year (less the balance brought forward) upon which no commission amounting to 5 per cent. has been charged ... ... ½ „

☞ Brokerage when paid is to be separately charged.

H W. I. WOOD,
Secretary.

CONVERSION OF STERLING FREIGHT INTO INDIAN CURRENCY.

The following Resolutions were adopted at a General Meeting of the Chamber, held on the 17th January 1882.

"That the Resolutions adopted, 31st May 1876, respecting "conversion into Indian currency of sterling freight "and commission thereon be hereby rescinded, and "that the following Resolutions be substituted in "their stead, with immediate effect, *viz.*:—

1. "That, in the absence of any stipulation to the "contrary, sterling freight payable in Calcutta, in- "cluding differences of freight adjusted in Calcutta, "and all commissions on sterling freight made pay- "able at Calcutta or there brought into account, "shall be reduced into Indian money at the rate of "exchange for Bank Bills on London on demand "which shall have been current on the mail-day "next preceding the day when the amount to be "dealt with shall be ascertained.

2. "That, in the absence of anything to the contrary ex- "pressed, the words 'current rate of exchange' shall "be held to mean the rate current for Bank Bills on "London payable on demand.

3. "That for the purpose of charging commission or "adjusting differences, freight expressed in dollars "(American) shall be converted into sterling at a "uniform rate of fifty pence per dollar."

Forms of Bill of Lading and Boat Note as adopted at a General Meeting of the Chamber of Commerce, on the 17th January 1880.

Shipped in good order and well-conditioned,

by_____

in and upon the good Ship or Vessel called the_____

whereof is Master for this present Voyage_____

and now lying in the Port of Calcutta and bound for_____

_____

being marked and numbered as in the margin, and to be delivered, in the like good order and well-conditioned, at the aforesaid Port of_____

(The Act of God, the Queen's Enemies, fire, and all and every other dangers and accidents of the Seas, Rivers, and Navigation of whatever nature and kind soever excepted)

unto_____

or to_____Assigns, Freight for the said Goods being payable as customary_____

_____

_____

with Average accustomed. In Witness whereof, the Master or Agents of the said Ship hath affirmed to_____Bills of Lading, all of this tenor and date, one of which being accomplished, the others to stand void.

Dated in CALCUTTA, this_____day of_____

Weight and Contents unknown.

No.....

Calcutta,.....18.....

To

THE COMMANDING OFFICER OF THE

Ship.....

SIR,

Please receive on board the undernoted Goods from Messrs.....

and grant a clean receipt for the same.

N.B.—This cargo is only shipped on the special understanding that the Chief Officer will sign for all counter or quality marks and numbers, and the Bales or Packages are not to be taken on board except on these terms, and also when a Sircar is in attendance to check the tally.

In case of any dispute, the Shippers request prompt information in writing from one of the Officers of the ship.

Marks and Numbers.	Number of Packages.	Description of Goods.	

No. .....

Calcutta, ...18.....

Received on board the ship.....
in good order and condition the undermentioned Goods from Messrs.....
.....

N. B.—The Chief Officer is requested not to take in any package unless he is prepared to sign for all the qualifying marks and numbers.
All packages in bad order must be returned.

Marks and Numbers.	Number of Packages.	Description of Goods.	

Arrived alongside.....
Discharged.....
Returned.....
Remarks.....

(Signature).....

Chief O[illegible]
Ship....[illegible]
Mooring[illegible]

MEMBERS OF THE CHAMBER OF COMMERCE.

Agelasto, A., and Co.
Apcar and Co.
Anderson, Wright and Co.
Acerboni, F., and Co.
Barlow and Co.
Begg, Dunlop and Co.
Burn and Co.
Barry and Co.
Balmer, Lawrie and Co.
Campbell, J., Esq., *Manager, National Bank of India.*
Carlisles, Nephews and Co.
Carritt and Co.
Crooke, Rome and Co.
Cohn Brothers and Fuchs.
Duncan Brothers and Co.
Dwarkanath Dutt and Co.
Ernsthausen and Oesterley.
Ewing and Co.
Elliott, John, and Co.
Ezra, E. D. J., Esq.
Finlay, Muir and Co.
Gisborne and Co.
Graham and Co.
Grindlay and Co.
Gubboy, Elias S., Esq.
Harper, G., Esq., *Agent, Oriental Bank Corporation.*
Henderson, George, and Co.
Heilgers, F. W. and Co.
Hoare, Miller and Co.
Huber and Co.
Hobson, Conor and Co.
Jardine, Skinner and Co.
Kettlewell, Bullen and Co.
Kelly and Co.
Ker, Dods and Co.
King, Hamilton and Co.
King, W. Vale and Co.
[redacted]. A. N. Langdon, Esq., *Manager, Delhi* [redacted] *London Bank, Limited.*
[redacted]ain, Esq., *Acting Agent, Charter-*[redacted] *of India, Australia, and China.*
Morriss, E., Esq., *Agent, Hong-Kong and Shanghai Banking Corporation.*
R. Murray, Esq., *Agent, Chartered Mercantile Bank of India, London and China.*
Mackillican, J., and Co.
Mackinnon, Mackenzie and Co.
Mackenzie, Lyall and Co.
Macneill and Co.
Macknight, Anderson and Co.
McIntosh, A. R., and Co.
Moran, W., and Co.
Oldemeyer and Hadenfeldt.
Payn, T., Esq., *Manager, Comptoir d'Escompte de Paris.*
Petrocochino Brothers.
Prawnkissen Law and Co.
Prestage, F., Esq., *Agent, Eastern Bengal Railway Company.*
Pigott, Chapman and Co.
Ralli Brothers.
Ralli and Mavrojani.
Reinhold and Co.
Rentiers and Co.
Schroder, Smidt and Co.
Schoene, Kilburn and Co.
Sassoon, David and Co.
Shaw, Finlayson and Co.
Sigg, Sulzer and Co.
Steel, Octavius and Co.
Struthers and Co.
Thomas, J., and Co.
Turner, Morrison and Co.
Ullmann, Hirschhorn and Co.
Wilkinson, Captain C. J., *Superintendent, P. & O. Company.*
Whitney, Brothers and Co.
Williamson, Magor and Co.
Wiseman, Mitchell, Reid and Co.
Wood, W. Esq., *Manager, Agra Bank.*
Yule, Andrew and Co.

Honorary Member :

Crawford, Esq., C. S., late Collector of Customs.

RULES AND REGULATIONS
OF THE
BENGAL CHAMBER OF COMMERCE.

First ..... That the Society shall be styled "THE BENGAL CHAMBER OF COMMERCE."

Second... That the object and duty of the Bengal Chamber of Commerce shall be to watch over and protect the general commercial interests of the Presidency of Bengal, and specially those of the port of Calcutta; to employ all means within its power for the removal of evils, the redress of grievances, and the promotion of the common good; and, with that view, to communicate with Government, public authorities, associations, and individuals; to receive references from, and to arbitrate between, parties willing to abide by the judgment and decision of the Chamb[illegible] and to form a code of practice to sim[illegible] and facilitate transaction of business.

Third.... That merchants, bankers, ship-[illegible] and brokers shall alone be admissi[illegible] members of the Chamber.

Fourth... That candidates for admission as me[illegible] bers of the Chamber shall be propose[illegible] and seconded by two members, and ma[illegible]

be elected by the Committee provisionally, such election being subject to confirmation at the next ensuing General Meeting.

Fifth..... That the subscription of firms and banks shall be 16 rupees per mensem, of individual members 10 rupees per mensem, and of mofussil members 32 rupees per annum.

Sixth..... That any member of the Chamber whose subscription shall be three months in arrears shall cease to be a member, and his name shall be removed by the Committee from the list of members after one month's notice of such default.

Seventh... That the business and funds of the Chamber shall be managed by a Committee of not less than five nor more than seven members, including the President and Vice-President, to be elected annually at a General Meeting of the Chamber in the month of May; the President, or, in his absence, the Vice-President, being ex-officio Chairman of the Committee, and in the absence of the President and Vice-President, the Committee to elect its own Chairman. Three to form a quorum.

Eighth... Annual elections of President, Vice-President, and members of the Com-

mittee shall be determined by a majority of votes of members, such votes being given in voting cards to be issued by the Secretary, numbered and bearing his signature; and no voting card shall be received for such purpose unless so authenticated. All vacancies created by the absence of the President, or Vice-President, from the Presidency for three months, or by departure for Europe, or by death, shall be forthwith filled up, and the election determined by votes to be taken as above and declared by the Committee. All vacancies created as above by the absence, departure, or death of any of the members of the Committee shall be forthwith filled up by selection by the Committee, subject to approval at first ordinary general meeting thereafter.

It is specially requested that before a [redacted] is returned to serve on the Committee, his [redacted] tor shall have ascertained his willingn[redacted] cept office in the event of his election b[redacted] cards.

Ninth..... That parties holding powers of [redacted] tion shall, in the absence of th[redacted] pals, be eligible to serve as memb[redacted] the Committee.

Tenth..... Two members of a firm or representatives of a bank shall not serve on the Committee at the same time.

Eleventh. That the Committee shall meet for the purpose of transacting such business as may come within the province of the Chamber at such times as may suit their convenience, and that the record of their proceedings be open to the inspection of members, subject to such regulations as the Committee may deem expedient.

Twelfth. That all proceedings of the Committee be subject to approval or otherwise of General Meetings duly convened.

Thirteenth. That a half-yearly report of the proceedings of the Committee be prepared, printed, and circulated for information of members three days previous to the General Meeting at which such report and proceedings of the Committee shall be submitted for approval.

[illegible]th. That the Secretary shall be elected by the Committee; such election to be subject to confirmation at the next ensuing General Meeting.

[illegible]th. That General Meetings of the Chamber shall be held at such times as the Com-

mittee may consider convenient for the despatch of business.

Sixteenth. That any number of members present shall be held to constitute a General Meeting, called in conformity with the Rules of the Chamber for the despatch of ordinary business.

Seventeenth. That on the requisition of any five members of the Chamber, the President, or, in his absence, the Vice-President, or Chairman of Committee, shall call a Special General Meeting, to be held within 15 days subsequent to receipt of such requisition.

Eighteenth. That every subscribing firm or bank shall be entitled to one vote only, and the the Chairman of Committee and Cl of General Meetings and Special G Meetings shall have a casting vote of equality of votes.

Nineteenth. That parties holding power ration shall, in the absence cipals, be entitled to vote.

Twentieth. That voting by proxy ed; provided proxies are members of the Chamber.

Twenty-first. That the Chamber reserves to the right of expelling any of its me

such expulsion to be decided by the votes of three-fourths of members present in person or by proxy at any Special General Meeting of the Chamber convened for the consideration of such expulsion.

Twenty-second. That strangers visiting the Presidency may be admitted by the Committee as honorary members for a period not exceeding two months.

Twenty-third. That no change in the rules and regulations of the Chamber shall be made, except by the votes of a majority of the members of the Chamber present in person or by proxy at a Special General Meeting to be held after previous notice of three months.

CALCUTTA:
Printed by Thos. S. Smith, City Press, 12, Bentinck Street.

REPORT

OF

THE COMMITTEE

OF THE

BENGAL CHAMBER OF COMMERCE.

For the half-year ended 30th April 1883.

CALCUTTA:
PRINTED BY THOMAS S. SMITH, CITY PRESS
12, BENTINCK STREET.

1883.

INDEX TO THE REPORT.

SUBJECTS:	Page.
Summary of Financial Statement	1
The Bill to amend the Criminal Procedure Code of 1872 ...	6
Necessity for the Development of Cheap Railway Communication in India	21
Insufficient Accommodation for the Export Trade of Calcutta...	31
Docking Accommodation acquired by the Port Commissioners	37
Hospital Dues and Port Charges	39
Telegraphic Communication between Saugor Island and Eastern Channel Light	43
Cruising Service of Pilot Brigs at the Sandheads	45
Maintenance of Steam Services in Indian Waters by State subsidies	49
Convention between Great Britain and the United States relating to Merchant Shipping	59
The Insolvent Debtors Act	76
Proposed levy of Fees for Clearance of Vessels after ordinary Working hours	81
Detention at Budge-Budge of Vessels with cargoes of Petroleum	83
Reduction of Railway Rates for carriage of Petroleum ...	90
Proposed Rules for the Importation, Possession and Transport of Petroleum...	97
Bill to regulate the Manufacture Keeping, Sale, Conveyance and Importation of Explosives	162
Importation of Explosives into India	163
Proposed levy of Duty on Brandy or Cordials in bottles containing Preserved Fruits	171
Duty on Perfumed Spirits	174
Amsterdam International Exhibition	192
Election of Major Conway-Gordon, R. E., as Honorary Member	*ib.*
New Members	194
Funds of the Chamber	*ib.*

INDEX TO THE APPENDIX.

Subjects:	Page.
Tonnage Schedule for the Port of Calcutta	iii
Schedule of Commission Charges	vii
Conversion of Sterling Freight into Indian Currency ...	x
Members of the Chamber	xi
Rules and Regulations of the Chamber	xii

Proceedings of the Half-yearly General Meeting of the Bengal Chamber of Commerce, held on Tuesday, the 7th August 1883.

J. J. J. KESWICK, ESQ., *President*, in the Chair.

The advertisement convening the meeting having been read by the Secretary, the Chairman addressed the members present, as follows :—

GENTLEMEN,—The last half-yearly meeting of the Chamber was held on the 31st January 1883, and the one being held to-day should have taken place in May last, but the Report now presented to you was not then ready. Last year's Committee, of whose labours the report is a record, were Messrs. R. Miller (President), H. Reinhold (Vice-President), W. H. Cheetham, D. Cruickshank, T. D. Ralli and J. Stevenson. The members of the present Committee are Messrs. J. J. J. Keswick (President), W. Bleeck, D. Cruickshank, L. King, T. D. Ralli, and J. Stevenson.

The Report treats of many matters which will be found interesting, and is so explanatory in itself, that it is not necessary for me to say much. The Financial Statement is first on the list of subjects

as usual. It will be noted that Major Baring draws attention to an increase of about 7 per cent. in the import trade in those articles which were exempted from duty in March 1882 in the ten months following, and also points out that there has been such an increase in the consumption of salt since the duty on it was reduced, that the revenue from it at the reduced rate will, in less than three years more, stand equal to what it was prior to the reduction. Some think, however, that Major Baring in his conclusions has not made sufficient allowance for the natural expansion consequent on the good harvests and general prosperity of the last two or three years. For myself, I have no doubt that the reduction in the salt duty stimulates its consumption, though we cannot indicate how much of the increase referred to has been due to the reduction.

The export duty on rice, which has long been a standing reproach to Indian financiers, continues, but it is at last recognised that it falls on the producer, and we may expect to see it have attention soon.

The importance of developing the wheat trade is clear to the Government, and the reduction in the railway rates on it, while helping it to compete more succesfully with American grain, will

prove no sacrifice, for the increased traffic which will be brought about by the reduction will soon more than restore the temporary falling-off in the receipts.

The late Committee caused a yellow covered pamphlet entitled "The influence on English Trade and American Protection of the Development of India," written by Major Conway-Gordon, R.E., to be widely distributed both here and at home in the beginning of the year, and all who have read the pamphlet will, I am sure, heartily welcome Major Gordon as an honorary member of the Chamber, and be glad that the Committee paid him the compliment of asking him to accept the position.

The Committee, in a letter to His Excellency the Viceroy, dated 10th March last, pressed upon the Government the importance of the views advocated in the pamphlet. The delay in the extension of railways in India is deplorable, and the time wasted in references to so many authorities in the endeavour to make antagonistic elements agree almost culpable. The Committee might well say that, unless some simpler system than the present one can be devised for dealing with the railway business of Government, it cannot help viewing the

future with the gravest apprehension. The Americans prospect, arrange, and construct great lines in half the time that is wasted in arguments between this and the India Office on the schemes, the desirability, feasibility, and necessity of which are patent to all practical men.

It has been well said that if private enterprise is to succeed in the construction of railways in this country, promoters must be assured that protracted delay will not occur in sanctioning the work, for capitalists cannot be asked to hold their money in readiness for an indifinite period, while the local authorities, the Provincial Government, the various departments of the Government of India, and the Secretary of State and his Council are arguing in an illimitable fashion the *pros* and *cons*.

I think it must be pretty plain to the Government by this time, however, as it is to us, that no satisfactory progress will be made in railway extension in this country without Government guarantees. The home public will not come readily forward with their money otherwise, especially now that the Government policy has changed with regard to Europeans in this country.

We are still suffering from want of sufficient port accommodation, and from the inability of the East Indian Railway, with its limited space and limited arrangements at Howrah, to give prompt delivery of consignments. The Government is giving attention to the matter, and it is expected that the construction of docks convenient to the present port will soon be decided on. It is much to be regretted that so great delay continues with regard to the building of a railway bridge over the Hooghly, unless, indeed, the delay eventuates in our seeing the site of the bridge changed to a position between the present floating bridge and Cossipore. I think we are all agreed that the position fixed upon at Hooghly is about the most inconvenient that could have been chosen, and that in making such a permanent structure, convenience should not be sacrificed to save a little extra outlay. The mercantile community have not been consulted, however, nor, I understand, have the Port Commissioners.

What the Chamber should stir for now is, increased accommodation on the Howrah side to meet the requirements of trade, until the wet docks and bridge are ready. Accommo-

dation on the Howrah side can be much increased.

We have seen the reductions which the Port Commissioners have made in the last few years in Port dues and Jetty charges, and your Committee have very properly been enquiring of Government for an expenditure account showing how the inward and outward pilotage, lead-money, hospital dues, &c., are appropriated, remarking that it would be satisfactory to the shipping interests to know that they are not called upon to contribute more than is essential to maintain the pilot service in all its departments in the highest efficiency. Although the statement was asked for in November, 1882, it has neither been supplied nor promised as yet.

It will be found that a large part of the Report is devoted to the requirements of the important and growing trade in petroleum, and it is satisfactory that the East Indian Railway Company has been induced to reduce its rate for full wagon loads of 260 to 280 maunds, or multiples thereof, from 50 to 33 pies per 100 maunds per mile. The restrictions on vessels arriving with petroleum are now in great part removed, and the test conditions and the provision of a convenient depôt are under consideration.

I need not add anything to what appears in the Report with regard to improvement required in the Insolvent Debtors Act, with regard to regulating the manufacture, keeping, sale, conveyance, and importation of explosives; and with regard to the other subjects I have not mentioned, save, perhaps, the Bill to Amend the Criminal Procedure Code of 1872; and so much has been said about it throughout the country already, that it is unnecessary to do more than express a hope that the memorial to the Viceroy, of which copies can be obtained on application to the Secretary, will be approved by you.

I may mention, and I know you will be sorry to hear it, that our old friend, Mr. Wood, is obliged to leave us for a few months to recruit his health. Mr. John Cowie will act for him in in his absence, which will be for a period of about four months.

The Chairman proposed, seconded by Mr. Turner, that the report be received and adopted.

Carried unanimously.

The Chairman then said:—I would ask you now, gentlemen, to confirm the late Committee's action in making Major Conway-Gordon an honorrary member of the Chamber, and to confirm the

admission of Messrs. Landale & Morgan, and Messrs. Mitchell and Waller as members of the Chamber.

This was seconded by Mr. Bigge, and carried unanimously.

With a vote of thanks to the Committee and the Chairman, the meeting then separated.

W. H. I. WOOD,
Secretary.

BENGAL CHAMBER OF COMMERCE.

Report of the Committee for the half-year ended 30th April 1883.

THE Committee submit their Report on the principal subjects which have had their attention during the past half-year.

SUMMARY OF FINANCIAL STATEMENT.

AS no legislation is to be undertaken in connection with the financial arrangements of 1883-84, the Financial Statement takes the form of a Minute, written by Major Baring, which is to-day published in the Gazette.

The Accounts and Estimates are presented in a new and simplified form. The figures are in conventional sterling, that is, £1 equals Rs. 10.

The Accounts of 1881-82 show the following result:—

	£
Revenue	73,696,000
Expenditure	71,113,000
Surplus ...	2,583,000

The value of the import trade in those articles which were exempted from duty last March has increased by about 7 per cent. in 10 months. There has been a general

fall in the retailed price of Salt in all the Provinces since the reduction of the duty, ranging from 12 per cent. in Oudh to 23 per cent. in Bengal. The consumption of Salt since March 1st, 1882, has increased by 6½ per cent., representing a Revenue of £320,000 a year, or about £302,000 in excess of the anticipations formed last March. Of this increase £163,000 falls to the year 1881-82, a very large amount of Salt having paid duty in the last three weeks of March 1882, and £139,000 falls to 1882-83. It is estimated that, should the same rate of increase continue, the Revenue at the reduced rate of duty will, in less than three years from the present time, stand at the same figure as it did prior to the reduction.

Turning to the Revised, formerly called the Regular, Estimates for 1882-83, it is to be observed that the net Opium Revenue is estimated at £7,217,000, being £33,000 less than the Budget Estimate, and £588,000 less than the actuals of 1881-82. The falling off is attributed to the increased competition of the indigenous Chinese drug. The charge under *Exchange* is estimated at £341,000 in excess of the Budget Estimate. The net cost of the Egyptian Expedition, after deducting the English contribution of £500,000 true sterling, is stated to be £797,000. In spite of these additional charges the Revised Estimate shows the following result:—

	£
Revenue	67,914,000
Expenditure	67,854,000
Surplus ...	60,000

This satisfactory result is attributed mainly to two causes. First, that the harvests have been good and the country prosperous; and secondly, that in view of the large fiscal reforms undertaken last year, the Estimates of Revenue and Expenditure were framed with even more than usual caution. It is also said that the Indian Revenue is more elastic than is often supposed. All the main branches of Revenue for 1882-83 show an excess over the Estimate, and some items of Expenditure are less than Estimate. A sum of £1,000,000 (true sterling) will, with the approval of the Debt Commissioners, be remitted toEngland before March 31st, 1883, for the reduction of sterling debt, the loss by exchange on this transaction being debited to the Account of the Commissioners. This is in addition to the ordinary requirements of the Secretary of State for the year which have already been remitted home.

It is pointed out that the only way India can meet the continued depreciation of silver is by developing trade, and especially exports. The uncertainty as regards the future of opium and silver necessitates the postponement of further fiscal reforms. Regret is expressed that the financial position does not permit of the export duty on rice being abolished. The question of Indian competing with American wheat in the London market is fully discussed, and it is shown that India, though labouring under great disadvantages as regards internal communications and other points, has the great advantage of Free Trade. The Railway rates on wheat from Northern India to Bombay are to be immediately reduced by 18½ per cent., equivalent to a reduction of 1*s.* 6*d.* a quarter in the London market A corresponding reduction will, without doubt, be made

on the East Indian line. Also the restriction giving lower rates only to large consignments is to be abolished on the Rajputana and Bombay, Baroda and Central India lines.

Turning to the Budget Estimates of 1883-84, it is observed that the net Opium Revenue is taken at £7,035,000 being £215,000 less than the Budget Estimate of 1882-83. The value of the rupee is taken at 1*s.* 7½*d.*, and the Expenditure under *Exchange* at £773,000 more than Budget Estimates of 1882-83. All the other Estimates are very cautiously framed. The result is as follows :—

	£
Revenue	67,274,000
Expenditure	66,817,000
Surplus ...	457,000

The reports on the Opium crop of the present season in Bengal are unsatisfactory, which will affect the finances of 1884-85, by necessitating a still further reduction in the sales of Bengal Opium, and, therefore, probably in the Opium Estimate. On this subject Major Baring makes the following remarks :—

"I will not venture to predict what may be financial "situation at the commencement of the year 1884-85. All "that can now be said on this subject is that we com- "mence the year 1883-84 with a surplus of £457,000 in "hand ; that the Estimates for 1883-84 have been very "cautiously framed; that the material prosperity of the "country is increasing, and, unless famine should inter- "vene, will continue to increase, with the result that the "Revenue from Excise, Salt, Stamps, Railways, &c., is

"steadily growing; and lastly, that by the reduction of "the Salt Duty the financial position has been much "strengthened, and a fiscal reserve constituted, which, "should the occasion unfortunately arise, can be used in "case of necessity. So long as the value of the rupee and "the Opium Revenue continue liable to such fluctuations "as those which we have recently witnessed, the financial "situation of India must always contain some special ele-"ments of instability, but I see no reason for taking a "desponding view of that situation at present. On the "contrary there is every reason to believe that the country "will be well able to cope with whatever financial diffi-"culties the future may have in store."

As regards the License Tax, it is said that no change is at present proposed, and that the Government, whilst recognising the inequalities in the incidence of the present tax, reserves full liberty of action in the future as to the method of its treatment. Stock Notes to the extent of only £163,000 have been taken up in the year, but prolonged experience can alone show whether the scheme will ultimately take root in the country. It is worth while to continue the experiment. Some modifications will possibly be made in the details. Post Office Savings Banks were opened on April 1st, 1882. The amount at present in deposit is £248,000. The number of depositors on December 31st, 1882, was 31,698, of whom 28,770 were natives, being a far larger proportion than in the case of the District and Presidency Savings Banks. The cash balance in India on March 31st, 1883, after allowing for payment of Secretary of State's Bills during the year, amounting to £15,042,000 true sterling, is estimated at

£13,840,000. The usual 4 per cent. loan for Productive Public Works will be contracted during the coming year. The amount will be £2,500,000. Full details will be notified on or about July 15th. The cash balance in India on March 31st, 1884, is estimated at £11,697,000; but this is a very moderate estimate and will probably be exceeded.

March 15th, 1883.

THE BILL TO AMEND THE CRIMINAL PROCEDURE CODE OF 1872.

A Bill to amend the Criminal Procedure Code of 1872 was suddenly introduced into the Legislative Council of India, on 2nd February 1883, and while the public were silent in surprise that a Government which had been showing a desire to take the mercantile community into its confidence should, without warning, move to have European British subjects outside the Presidency towns put under the jurisdiction of natives in criminal matters; the said Government was making a push to get the Bill referred to a Select Committee, so that opinions might there be recorded in its favor, and public discussion avoided. The measure, however, being one most hurtful to all who have interests in the Mofussil, your Committee at once called a

Special General Meeting of the Chamber for 21st February, and the proceedings at that Meeting and the memorial drawn up and sent to Government against the Bill are now put before you.

From Chamber to Government of India.

Calcutta, 6th March 1883.

At a Special General Meeting of the Bengal Chamber of Commerce, held on Wednesday the 21st of last month, Resolutions were adopted with reference to the Bill to amend the Criminal Procedure Code of 1872, so far as it relates to the exercise of jurisdiction over European British subjects; and I am desired to forward copies thereof, hereto annexed, with the request that the same be submitted to the Legislative Council of His Excellency the Governor-General of India.

1*st Resolution.*—Proposed by J. J. J. Keswick, Esq.,
Seconded by James Murdoch, Esq.

That in the opinion of this Meeting the alteration of the law proposed by the Government in the Bill entitled "A Bill to amend the Code of Criminal Procedure of 1872, so far as it relates to the exercise of jurisdiction over European British subjects," calls for the unqualified disapproval of the Bengal Chamber of Commerce, and should be opposed to the utmost by every means in its power.

2nd Resolution.—Proposed by J. W. O'Keefe, Esq.,
Seconded by J. P. Thomas, Esq.

That a sub-Committee of this Chamber be appointed to draw up a memorial to Government, protesting against the Bill, and to take steps to procure signatures to the memorial throughout every district.

3rd Resolution.—Proposed by the Honorable R. Miller,
Seconded by E. E. Bigge, Esq.

That the following Members of the Chamber be invited to form the sub-Committee for the foregoing purpose: J. J. J. Keswick, Esq; D. Cruickshank, Esq; J. Murdoch, Esq; J. Flemington, Esq; A. G. Watson, Esq; F. Aitchison, Esq; with power to add to their number.

4th Resolution.—Proposed by R. A. Turnbull, Esq.,
Seconded by J. J. Guise, Esq.

That this Chamber confer with the Chambers of the Bombay and Madras Presidencies so as to take united action against the Bill.

Present:—The Honorable R. Miller, President, in the Chair; Messrs. H. B. H. Turner, J. J. J. Keswick, D. Cruickshank, T. D. Ralli, J. Hay, W. R. T. Aitken, J. J. Guise, A. G. Watson, J. Mackillican, J. Murdoch, F. Whitney, E. F. Whitney, J. Horne, F. Aitchison, T. Carritt, J. Thomas, D. Fuchs, J. P. Thomas, R. Mitchell, R. A. Turnbull, W. H. Cheetham, C. E. Smyth, J. Stevenson, E. E. Bigge, J. R. Croft and J. W. O'Keefe.

From Bengal Chamber of Commerce to H. W. PRIMROSE, ESQ., *Private Secretary to His Excellency the Viceroy and Governor-General of India. Calcutta, 25th April* 1883.

SIR,

By direction of the Committee of the Bengal Chamber of Commerce, I have the honor to forward herewith for submission to His Excellency the Viceroy and Governor-General of India a Memorial from the Chamber of Commerce relative to the Bill to amend the Criminal Procedure Code of 1882.

I have the honor to be,
Sir,
Your most obedient servant,
H. W. I. WOOD.
Secretary.

To
HIS EXCELLENCY THE MOST HON'BLE
THE MARQUIS OF RIPON, P.C., K.G., G.C.B., G.M.S.I.,
Governor-General of India in Council.

THE humble Memorial of the
BENGAL CHAMBER OF COMMERCE.

SHEWETH,—

THAT your Memorialists have considered the provisions of the Bill to amend the Code of Criminal Procedure, 1882, and they beg respectfully to submit to Your Excellency in Council their deliberate and well-considered views respecting this measure.

Your Memorialists venture to think that their views may be worthy of attention, because they, and those with

whom they are connected, are brought into direct and intimate relations with the natives of this country. Those views are based upon long and wide experience. Your Memorialists hope, moreover, that the fact that they do not apprehend any personal application of the proposed measure in their own case, and that many of them may probably retire from the country before the fruits of the proposed change mature, will strengthen rather than weaken the force of their opinion. That opinion may not coincide with the sentimental and theoretical views of persons devoid of experience as to the actual circumstances of the country, or of those who ignore differences, of race, creed, education and habits; but your Memorialists trust that their sentiments deserve to be treated as something far removed from blind panic, unreasoning clamour, or factious opposition. It commonly happens, indeed, that Englishmen come to this country imbued with benevolent or sentimental theories, most of which are based on the assumption that political equality between the European and Native races is possible and desirable; but such equality your Memorialists consider an illusion —an illusion which has, indeed, a semblance of generosity, but which very slight experience suffices to strip of its specious attractions and altogether to dispel. Those who have not penetrated beneath the plausible surface which the Oriental usually presents to European eyes may continue to cherish such an illusion; but it is impossible for those to do so who, like your Memorialists, are brought into daily contact with the various classes of the people in the ordinary transactions of life.

Your Memorialists, as a body of mercantile men, are deeply interested in all that may affect the development

of the resources of this country. They recognise that their interests as representing European capital in this country, are bound up with the security and prosperity of the country; and are, therefore, indentical with the true interests of their native fellow-subjects. Your Memorialists feel sure that it is not necessary to press upon the attention of Your Excellency in Council the disastrous effects of insecurity, or even a feeling of insecurity, upon trade and commerce. It is superfluous to insist upon so obvious a fact of experience as the sensitiveness of capital. A sense of insecurity, especially a sense of personal insecurity arising from want of confidence in the administration of Criminal Justice, cannot fail to paralyze capital and to arrest its flow into the country, while it will unjustly impose serious sacrifices on those who have already invested their capital in reliance upon the existing state of security.

Your Memorialists regret that their experience compels them to condemn, emphatically, the present Bill, and to view with distrust the policy which appears to underlie it.

Your Memorialists trust that it is not too late to express such an opinion. They submit that the admission of natives into the Civil Service does not in the slighest degree preclude objection to the policy of the present measure. The public could scarcely be expected to foresee the present development of that policy: since the Government itself did not contemplate such a result, even down to the framing of the present Criminal Procedure Code. Nor did the large mass of opinions and reports submitted when that Code was in preparation indicate such a result as desirable, much less as inevitable; for although nearly two hundred opinions were then laid

before Your Excellency in Council, only one faintly foreshadowed any such measure. The Government admitted natives into the Civil Service subject to the restrictions at present existing. Had the Government then contemplated perfect equality of powers, it would doubtless have considered itself bound in fairness to make known its views at that time. Had any such development been foreseen, it would undoubtedly have called forth the same objection as is now urged against the present measure; which measure, it is now said, is a necessary consequence of the step then taken.

Your Memorialists further venture to submit that neither the present measure, nor the policy upon which it appears to be based, are necessary or legitimate developments of the spirit of Her Majesty's Proclamation of 1858. If that Proclamation involved such changes as the present Bill contemplates, further advance in the same direction would be inevitable; so that the finality claimed for this measure could not exist. Her Majesty's Proclamation, however, does not profess to prescribe or define the course of future legislation, which is by law placed under the control of Your Excellency in Council.

Nor does Her Majesty's Proclamation declare or even contemplate that any larger share in the government or administration of the country than was then enjoyed by the native races should be conceded to them: or that those races should attain greater power or influence. It declares that, "so far as may be," all Her Majesty's subects, "of whatever race or creed," shall be freely and impartially admitted "to offices, the duties of which they may be qualified by their education, ability, and integrity

duly to discharge." This declaration is not confined to any class of Her Majesty's subjects, and leaves their employment to be determined, subject to the existing law, by their fitness and other circumstances of the case.

The Proclamation initiated no new policy.

The view above submitted is that adopted by successive Governments, including the Government which framed and issued the Proclamation. Their action shews that they did not consider themselves bound to accord to the native races any greater share of the administration than the circumstances of the time rendered fitting. To attribute to them a different view would be to charge them with deliberate disregard, of the settled policy of the country; since natives were not, until recently, even eligible for the Civil Service.

Moreover, your Memorialists venture to submit, that it would not have been competent to Her Most Gracious Majesty, by Proclamation, to prescribe the course of future legislation—a consideration which appears conclusive as to the true scope of the Proclamation in question.

Your Memorialists, therefore, deem themselves at liberty to consider this proposed measure on its merits, both as regards its policy and its detailed provisions.

The policy of the Bill is set forth in the "Objects and Reasons," and has received further elucidation and development by Your Excellency in Council.

All parties agree in considering that policy to be the policy of forthwith conceding a larger share in the administration to the native races. The conclusion that

this is the policy of the Bill is forced upon your Memorialists. The same conclusion is eagerly adopted by the natives.

Your Excellency's speech in Council appears to confirm this view: since Your Excellency based the defence of the Bill, as your Memoralists understand, upon the Queen's Proclamation, which Your Excellency appeared to consider a declaration of the principle of complete equality between the Englishman and the Native. The statement of Objects and Reasons of the Bill is to the same effect: for it states that "it was thought anomalous that, while natives of India were admitted to the Covenanted Civil Service, and held competent to discharge the highest judicial duties, they should be deemed incompetent to be Justices of the Peace and to exercise jurisdiction over European British subjects outside the Presidency towns;" it speaks of "removing the present bar upon the investment of Native Magistrates in the interior with powers over European British subjects;" and then proceeds to say—"The Government of India has accordingly decided to settle the question of jurisdiction over European British subjects in such a way as to remove from the Code, at once and completely, every judicial disqualification which is based merely on race distinctions."

Your Memorialists can discover no anomaly in the existing system beyond the natural anomaly that races differ; with the result that the subject race is unfit to govern the dominant race.

The Bill ignores this difference, and, assuming equality for the purposes contemplated, proceeds to bestow upon certain classes of natives a further share in the adminis-

tration of justice, irrespective of race, and as a matter of right. The policy might have been more plainly stated: but it is impossible to escape the conclusion at which all parties have arrived as to its character.

This policy rests upon the assumption that a native who has attained a certain position in the administration is, in all respects, as well qualified as an Englishman to perform all duties which an Englishman of similar position may be set to perform. To proceed to apply this theory—a theory requiring a bold disregard of fact and experience—to so delicate a matter as the administration of Criminal Justice between the two races, is surely not warranted, much less required, by the Queen's Proclamation. That Proclamation expressly provides for actual fitness in the person employed of whatever race he may be; and significantly points to education and integrity as elements in the qualification. Your Memorialists submit that no reasonable person can possibly ignore the difference of character arising from difference of race, or venture to assume that, even with like education and similar surroundings, such difference could be eradicated.

But here the original difference of character is heightened by difference of education, influences, habits, creed and aims. It appears to your Memorialists that the policy in question rests upon a confusion of ideas with regard to the Proclamation, namely that the absence of disability implies fitness.

This policy your Memorialists view with the utmost anxiety, and they regard the necessity of discussing it as a public misfortune. They cannot admit the assumption upon which it rests: or allow that a few years in England

can possibly qualify natives of this country to take the same share in the administration of the country as Englishmen. But the Bill does not contemplate that class alone, or chiefly; but includes within its purview those educated in this country, surrounded by every influence which tends to widen the gulf of race distinction.

Your Memorialists are fully sensible of the wisdom of laying the foundations of Government deep in the welfare of the governed; and they are always ready, when consulted, to approve any well considered measures tending to the real benefit of the natives; but your Memorialists are convinced that it is cruel to them, and mischievous to the State, to affect to countenance such illusions as the policy of the present Bill seems calculated to encourage. Such illusions, if persisted in, are, in their opinion, calculated to cause grave and serious disaster throughout India, and that too in no very remote period of time.

This Bill, when originally brought forward, was rested solely on the ground that it would remove an anomaly. There was no suggestion of administrative difficulty; nor has any such difficulty been suggested as might not be surmounted without public detriment. It has, indeed, been stated that, inasmuch as one-sixth of the Civil Service may consist of natives, there must ultimately be administrative difficulty; but it is obviously impossible at present to foresee whether it may not be quite easy to overcome that difficulty should it ever occur. It is, at any rate, sufficiently clear that no serious difficulty has at present arisen, or can at present arise. The suggested difficulty is, therefore, purely speculative.

On the other hand, the immediate mischief actually resulting from even the introduction of this Bill, is, unfortunately, no longer a matter of speculation. Bitter race feelings have been evoked by what is felt, and your Memorialists think rightly felt, to be an unnecessary, ill-judged and ill-considered attack on a justly cherished right. A wise statesmanship would, they venture to think shrink from evoking such feelings, and would certainly not encounter such mischiefs in pursuit of any merely speculative good. But the harm does not stop there:—the proposed tribunals will necessarily invite distrust, instead of commanding that public confidence which is essential to the due administration of justice. Here, surely, is an administrative difficulty of sufficient magnitude to disturb all who value the efficient administration of justice. The mischief, moreover, does not stop even here; for out of the evils indicated, mischievous results will arise, at present incalculable;—distrust engendered, paralysis to enterprise and discouragement of the naturally loyal; these are but some of the baneful results which may be reasonably apprehended. Such fears, it is said, have been often entertained and as often falsified. It is true that English feeling as to matters affecting the relations between the two races is highly sensitive. This, however, seems to your Memorialists the reverse of a reason for disregarding it; seeing that such sensitiveness arises from a perception of the danger involved in any disturbance of the relations at present existing. Your Memorialists regret that they cannot admit that such fears have been unfounded in time past, for they feel that the position of Englishmen in India has been lowered, and consequently the foundations of British security

perceptibly affected by every similar measure in the past.

Your Memorialists, judging from past experience, cannot help fearing that like effects will accrue from the present measure, and it must tend to deprive Englishmen settled in this country, comparatively few and often widely scattered, of that position which is universally felt to be essential not only to their welfare and to the safety of themselves and their families, but also to the very existence of British rule. It is to such settlers that the real acquisition of India as an integral portion of the Empire may be traced and justly credited. It is the beneficent flow of peaceful commerce which has turned the desolation of conquest into fruitful prosperity.

And to what end is society to be thus moved to its depths?

Your Memorialists respectfully submit that the susceptibilities of the entire British community deserve to be, in the eyes of a British Government, as worthy of consideration as the susceptibilities of a few native officials. There can be no pretence of any injustice to be remedied; for these gentlemen entered the service upon the footing of the existing law: and, indeed, could not have obtained admission on the footing now claimed for them without exciting the same feelings as have now been aroused. The proposed measure seems to your Memorialists to be in every way unjust and impolitic, uncalled for by administrative necessity, calculated to evoke feelings of race antagonism which prudent statesmanship would allow to slumber, tending to create distrust of the policy of Government, and to destroy confidence in the administration of the Criminal Law.

Your Memorialists do not desire to dwell unnecessarily upon the details of the proposed measure. They venture, however, to call attention to a singular inconsistency in the utterances in Council respecting one provision of the Bill. The supposition that a native would never be appointed a Cantonment Magistrate was welcomed as obviating what could not be denied to be a danger, the danger, namely, of allowing British soldiers to be tried by native Magistrates. But surely it is part of the anomaly sought to be removed that a native should not be so appointed: and it is strange to set about removing one anomaly in reliance upon the existence of another. The satisfaction, however, created by the existence of that anomaly is rudely shaken when it is remembered that a Cantonment Magistrate may become subordinate to a native Collector; who, as his superior magisterial officer, is, in the exercise of his discretion, entitled to assume jurisdiction in criminal cases ordinarily triable by a Cantonment Magistrate.

The Bill also, while empowering Natives to try Europeans, excludes Europeans from such functions; unless, indeed, such Europeans are Members of the Covenanted Civil Service, Assistant Commissioners in Non-Regulation Provinces, or Cantonment Magistrates. The Bill, therefore, in pursuit, as is professed, of race equality, creates race inequality, and disqualifies, as was pointed out in Your Excellency's Council, a considerable and useful class of Magistrates, who would, otherwise, have exercised the function of trying Europeans with benefit to the community, as numerous members of this class have hitherto done.

In conclusion your Memorialists feel confident that Your Excellency in Council, solicitious for the welfare and prosperity of all classes of Her Majesty's subjects, will accept the results of practical experience, and will give such weight as may be due to the views herein submitted. If, as your Memorialists trust, those views recommended themselves as just:—if the opinion of your Memorialists is, as they venture to hope, entitled to weight, as representing the feeling of the European Mercantile community:—if Your Excellency in Council is satisfied that in passing this measure you will be disregarding the feeling of the Mercantile and European community, even should that feeling fail to meet with sympathy from Your Excellency in Council:—then your Memorialists cannot doubt that Your Excellency in Council will not shrink, in the interests of good Government, from withdrawing the present Bill without further delay,—a result for which your Memorialists humbly pray,

On behalf of the Memorialists,

ROBERT MILLER,

President, Bengal Chamber of Commerce.

H. W. I. WOOD,

Secretary, Bengal Chamber of Commerce.

CALCUTTA, 19*th April* 1883.

Government House, Simla, 28*th April.*

SIR,

I have laid before the Viceroy the Memorial from the Bengal Chamber of Commerce relative to the Bill to amend

the Criminal Procedure Code, which you forwarded in your letter to me of the 25th instant; and His Excellency desires me to request that you will inform the Committee that the Memorial will receive careful consideration from himself and his colleagues.

I have the honor to be,

Sir,

Your obedient servant,

(Sd.) H. W. PRIMROSE.

H. W. I. WOOD, Esq.

NECESSITY FOR THE DEVELOPMENT OF CHEAP RAILWAY COMMUNICATION IN INDIA.

Early in the year a pamphlet was published in Calcutta which endeavoured " to show the dominant position India occupies as the source of supply of wheat to Europe; the ease with which the greater part of the English grain trade could be diverted from America to India; and the advantages, both to the English manufacturer and to the Indian ryot, that would result from India becoming the sole source of supply of wheat to the United Kingdom. "

The pamphlet attracted considerable attention, and received general concurrence in its main contention, that cheaply constructed railways and the lowest scale of charges, would confer immense benefit on the wheat trade of India and advance its general agricultural and manufacturing industries.

Your Committee were of opinion that early opportunity should be taken of bringing this ably discussed question prominently under the notice of the Viceroy and Governor-General, and of pressing upon His Excellency's consideration the urgent necessity for removing as far as possible the obstacles that prevented the Indian wheat trade from competing with that of America on more equal terms. They, therefore, addressed the following letter to this Excellency at whose hands it will no doubt receive the fullest attention :—

To

HIS EXCELLENCY THE MOST HONOURABLE
THE MARQUIS OF RIPON, K. G., G. M. S. I.,

Viceroy and Governor-General of India.

Dated Calcutta, 10th March 1883.

MY LORD MARQUIS,—

I AM desired by the Committee of the Bengal Chamber of Commerce to forward for Your Excellency's perusal a copy of a pamphlet on the development of India, which has lately been published at Calcutta, and which has attracted considerable attention on the part of the mercantile community of this place.

As in most papers, written with the special object of exciting interest and inquiry, and which deal with very large and comprehensive subjects, the writer may be said on some points to have somewhat overstated his case, and, perhaps, on others, to have under-estimated the difficulties that doubtless surround the large questions of which he treats.

But in the main, the views taken in the paper appear to the Committee to be correct and sound. The facts advanced are chiefly in connection with the wheat trade of India; but on this point the Committee may add that there is hardly a trade or a manufacturing industry, either in England or in India, which is not directly interested in the development of cheap communications in India, and in the expansion of trade that would undoubtedly follow from thus affording an outlet for the agricultural products of the country.

Believing that there can hardly be a subject which, throughout all the educated community, both European and Native, should command a more universal interest than that dealt with in this pamphlet, the Chamber of Commerce has ventured to bring it prominently to your Excellency's notice.

From information before the Chamber, it would appear to be a positive fact that in many parts of India, even within the Lower Provinces of Bengal itself, a bumper harvest, at the present time, is a positive misfortune to the ryot. Last year, and the year before, it is beyond doubt that difficulty was experienced by the Government in collecting the revenue, by the zemindars in realising their rents, and by Manchester merchants in selling their piece-goods, to a great extent owing to the disastrously splendid harvests. Rice and food were so cheap that people, a few miles from the railway, could hardly realise enough specie to pay their rents or to buy the few articles of English manufactured goods they ordinarily consume.

In Central India, along the valley of the Máhánadi, year after year, wheat may be purchased at from 5 to 6

shillings per quarter. The greater part of this country is an expanse of fertile soil, where grain and oil-seeds cotton and tobacco, might be grown in enormous quantities were facilities only given for this agricultural produce to find a market. But at present there is no access to this country from Calcutta by rail;—the province is practically closed to all foreign trade with this side of India;—there is neither any outlet for the surplus corn produced, nor any means by which English salt and English piece-goods can penetrate into the interior of the country.

The loss, both to England and to India, that is caused by the present defective communications of India is, in the opinion of the Chamber of Commerce, important enough to come properly within the sphere of practical polity. The evil affects both countries, for there can be no doubt, could the whole of the surplus agricaultural products of India be profitably placed on the markets of Europe, the larger export would, to a great extent, be balanced by a greater consumption of English goods in this country. The Committee acknowledge gratefully the recognition given by your Lordship's Government to the existence of Indian industries, and while admitting fully the justice of your Lordship's remarks at the recent Trade's Dinner on the unsoundness of so-called "protection," the Committee would add that the removal of obstructions to the existing trade of the country is the only species of protection that is asked for.

As regards the extension of railways, the only cause the Committee can assign for the singular delay that now occurs in the construction of lines, of which every

one admits the pressing necessity, is the multitude of different authorities through whom every railway scheme has to permeate before any final decision can be arrived at. The present system is so involved, that there is no wonder that years may, and do elapse before any decision can be arrived at even with regard to lines of paramount importance to the trade of the country.

As instances of such delay, the Chamber would specially call attention to the following cases :—

(1.) *The Indus Bridge at Sukkur;* the link now wanting between the granaries of the Punjab and the sea-board.

After years of discussion, the construction of the Indus Valley line was decided upon in the year 1869 ; the line was opened throughout in 1878, and now, in the year 1883, the design for the Indus Bridge is not even yet decided upon.

(2.) *The Hooghly Bridge,* the completion of which is so urgently required for increasing the shipping facilities of the Port of Calcutta.

The first design of this bridge was drawn out in August 1879, and to this date, the Committee believe, the iron work for the bridge has not yet arrived from England.

(3.) The *Nagpur-Calcutta Railway.*

The surveys for a line running from Nagpur eastward through the Central Provinces as far as Chattisgurh were completed and the project submitted to the Government of India in November 1871. Orders on the project did

not apparently issue till the year 1875-76. The alignment of the Railway was finally fixed upon in 1876-77. Nothing was done in 1877-78. Orders for the construction of the line were issued only in May 1878, nearly seven years after the project had been submitted. The first section of line was opened on the 6th April 1880. As regards the extension of the line towards Calcutta, the Committee understand that, although the railway will open out some of the richest districts in India, both in agricultural and mineral wealth, and although the surveys were practically completed last year, sanction cannot yet be obtained from the India Office for the commencement of the line.

Unless some simpler system can be devised for dealing with the railway business of Government, the Chamber confess they view the future with the gravest apprehension. The accommodation available at the Howrah station is already far too small for the existing trade of the Port of Calcutta, and the present inconveniences are daily increasing with the additional traffic brought to the port by the various sections of railway newly opened from time to time. It will, the Chamber fear, be impossible for the shipping facilities of Calcutta to expand *pari passu* with the trade *unless some single and final authority in this country is empowered to deal more expeditiously with all the railway and shipping questions involved, as they arise.*

Much stress has lately been laid by Government on the desirability of promoting the construction of railways by private enterprise. On this point the Committee ventures to suggest, that it will be almost impossible to attract

local capital to the construction of railways until promoters can be certain of a more speedy decision with regard to the schemes they place before Government for approval.

At present, when a scheme is put forward by capitalists both ready and able to carry it out, after the scheme has been carried through the Local Authorities, the Provincial Government, and the various Departments of the Government of India, all of which necessarily takes some time, it is almost certain that nearly every important point in connection with the proposed line will have to be referred home to the Secretary of State in Council; the Council representing a large deliberative body of almost every shade of opinion. Under the most favourable circumstances, at least a year must probably elapse between the inception of the scheme and the reply from England.

Under such circumstances how can it be expected that railway construction by private enterprise will be warmly taken up in this country? It cannot be expected that capitalists will consent to lock up a large amount of money (liable practically to be called upon at any moment) for the considerable period of time which a reference home now necessarily entails.

It appears to the Committee that, subject to certain general principles, and also within a certain limited scope of railway extension, to be in each case laid down by the Secretary of State, the Government of India should be empowered to deal finally with railway schemes put forward by promoters in this country. If private enterprise is to succeed (and more especially in this country, where the construction of work can be carried on only at certain

seasons, and where hence a delay of only a few weeks means, in many cases, the loss of a whole year) it is an absolute necessity that promoters should be assured that no protracted delay will be allowed to occur before they are authorized in proceeding with the work.

Regarding the reduction of railway rates, an analysis of the published accounts of the various Companies leads the Committee to a belief that the standing charges (*i.e.*, those that do not fluctuate materially with the traffic carried) form so large a percentage of the total working expenses of railway lines, that a moderate increase of traffic soon balances a material reduction in rates. Without burdening this letter with the detailed statistics on which this conclusion is founded, the Committee will here content itself with observing that goods rates have, within the last few years, been to some extent reduced, and that, speaking generally, with each reduction of rates the net profits of the railways have increased. The Committee believe the limit has not yet been reached at which a reduction of rates would result in more than a very temporary loss to the Railway Revenues of Government.

The Committee trusts not only that some investigation may be made with the object of solving how far the railway goods rates could, in the interests of the country, be reduced without loss either to the Railway Companies or to Government, but also that some practical decision on the subject may be arrived at, and early acted upon. The Chamber feel the urgent necessity of removing, as far as possible, without any further delay, the obstacles that now prevent the Indian trade from competing with that of America on more equal terms.

The Committee of the Chamber of Commerce would be glad to see some recognized point of contact established between the daily increasing trade of the country on the one side, and the Government railway interests on the other. Should the necessary powers be given to the Government of India to deal (within certain limits) with all railway business in this country, the authority who may represent this department of the Government of India will doubtless in himself furnish the point of contact required. But in addition to this, it seems to the Chamber of Commerce advisable that some means should be devised of bringing the Chairman of the Port Commissioners, the Director-General of Railways, the Government Consulting Engineer, the Agents of the E. I. and E. B. Railways, and all the other authorities directly connected with the detailed export and import business of the trade of Calcutta into some regular system of *personal* communication, in order to facilitate the discussion and the settlement of all the numerous and intricate questions involved.

These matters have been so often the subject of deliberation on the part of your Excellency's Government, that the Committee confidently hope that the whole of the questions may now be considered sufficiently ripe for some immediate action to be taken with regard to them. In the interests of the entire Anglo-Indian trade, the questions of the more rapid extension of the Indian railways, of the reduction of the goods rates, and of the provision of more extended shipping facilities at the principal Indian ports, appear to urgently call for prompt action on the part of Government.

Along with the great advantages to the cotton, the iron, and the ship-owning interests in England, which would

be secured by the development of the trade of India, the Chamber have in view no less the advancement of the material prosperity and the advancement of the natives of this great country.

Whatever conclusions may ultimately commend themselves to your Excellency, the Bengal Chamber of Commerce feels assured that the pressing and vital questions dealt with in the paper now forwarded, and which they have been enabled to touch upon only briefly in this letter, will receive the careful and earnest attention that questions of such extreme importance to the welfare of all classes of Her Majesty's subjects so unquestionably deserve.

I have the honor to be,

MY LORD MARQUIS,

Your Lordship's most obedient humble servant,

H. W. I. WOOD,

Secretary of the Bengal Chamber of Commerce.

From Private Secretary to H. E. The Viceroy and Governor-General of India, to Chamber.

Government House, Calcutta, March 14th 1883.

I am desired by His Excellency the Viceroy to acknowledge with thanks the receipt of your letter of the 10th March, enclosing copies of a pamphlet on the development of India.

His Excellency wishes me to say that the pamphlet and the views of the Chamber of Commerce as expressed in your letter, will receive his early and full

attention; and I am to ask you to be good enough to send a few spare copies of the letter if you have them by you.

INSUFFICIENT ACCOMMODATION FOR THE EXPORT TRADE OF CALCUTTA.

The following letter to the Government of Bengal represents the inadequacy of the accommodation now available in the port for its increasing export trade, the insufficiency of space at Howrah, and the consequent injury done not only to the interests of Calcutta but to those of all other parts of the country connected with it, by preventing a much larger volume of trade being put through than existing arrangements will admit of.

A Committee of members of the Port Commission and the Chamber are now considering the measures most practicable for extending the accommodation of the Port.

From Chamber to the Government of Bengal.

Calcutta, 28th February 1883.

THE Committee of the Bengal Chamber of Commerce request me to address you on the subject of the accommodation now available in the Port of Calcutta for export cargo.

In the early part of last year a Committee, appointed by the Government of India to consider the question of establishing Central Railway Stations in Calcutta, sat with reference to the general subject. It now approaches a year since that Committee met, but so far no result has been made public; and whereas the volume of the trade of Calcutta is steadily increasing, no material progress appears to have been made to enlarge the means of carrying on the trade which is already far beyond what the port, as at present furnished, can handle with advantage.

With regard to the Central Passenger Station, the Committee have only to say that in their opinion such a station would be a great improvement to the town: the objectt of the present communication is however to bring to the attention of Government a matter which very deeply concerns the commercial interests of Calcutta, and not of Calcutta only, but of every part of the country to which Calcutta serves as a Port.

The space which is now available at Howrah for the accommodation of export cargo is insufficient for the trade.

The utmost endeavours of the East Indian Railway cannot place much more than 4,000 tons of cargo in the hands of its consignees within one working day. In order to remove that quantity, consignees are compelled to take their goods away as fast as the Railway Company can deliver it; that is to say, scarcely any time is afforded to consignees to ascertain that the weight or quality of their cargo is correct: the process of delivery is almost confined within the strict limit of delivery and removal. If the goods are intended for shipment, as is the great bulk of the downward cargo, and if the vessel for which they are intend-

ed is not ready to receive them at the time of delivery, they must either be carried in carts across the bridge to Calcutta at considerable risk and cost, or placed in boats and become liable to loss and demurrage.

The space at Howrah as now available is equal to the delivery under conditions satisfactory to the consignee of hardly more than 2,000 tons per day; or at high pressure rate under conditions satisfactory neither to the Railway nor to the consignee of barely more than 4,000 tons: whereas the other conditions of the trade as regards supplies in the interior and demand from foreign countries, are frequently in the course of the season favourable to a daily volume of double the larger amount.

If there were space enough at Howrah to permit of a satisfactory delivery to consignees, a very much greater volume of trade would frequently be put through; so that the existing condition of things causes a distinct limitation to the trade of this Port.

The injury done by the restriction of space the Committee believe to be enormous, not only to the interests of Calcutta as a Port, but to every part of India with which Calcutta is connected by trade, and to be very far reaching in its effects.

So long as the condition of things now complained of continues, it seems almost futile to talk of Railway extensions in the interior of Bengal in connection with the East Indian Railway: the terminus of that line is unable to deal with the traffic it already possesses, and to enlarge that traffic will simply be to increase our embarrassment.

It is also premature to agitate for another reform, which,

like railway extension, is most urgently wanted, namely a general reduction in the rates of freight.

It is a fact, which requires no proof, that each successive reduction in rates of railway freight leads almost instantly to a fresh accession of both traffic and of profit, of trade to the country and of profit to the railway : but there can be neither the one nor the other, if without reference to what the line can carry or the country can export, the limit of delivery at the terminus has been already reached.

A hope is held out to the Chamber that great relief at Howrah will be felt as soon as the Hooghly Railway Bridge is completed, and the passenger traffic diverted thence to the Town of Calcutta. The opening of the Railway Bridge will not, however, be effected for some years : it is stated that, owing to non-arrival of materials, the delay of a year beyond the original period estimated is already assured. In the meantime, the trade of Calcutta is struggling to grow, and unless much greater accommodation than that which the whole of the Howrah station can afford is provided, the prospect of real relief is as distant as ever.

Whatever steps are to be taken to place the facilities for trade in this port on equal terms with the demand for them, the Committee of the Chamber would urgently represent that action ought to be taken at once, and the steps they desire to advocate are as follows :—

The space on the railway foreshore where the river is deep enough to allow of boats loading from the bank should be made use of for storing and sampling sheds. The Railway and Government Engineers are most competent to say in what way the Howrah side of the river can be best made use

of, and no time should be lost in so applying it: in addition to this, preparation should be made to avail of the entry of the East Indian Railway into Calcutta which will take place when the Railway Bridge is finished.

The accommodation at Howrah should be considered merely supplementary to larger accommodation on the left bank of the river.

In considering of what nature this latter should be, several points have to be taken into account:

1. The cargo which will come into Calcutta is divisible into 2 classes,—the goods intended for shipment, and the goods intended for local consumption.

2. A main depôt at Chitpore on the Canal or at Sealdah would be of little real service to exporters of produce by the East Indian Railway: it is too far from the shipping: goods discharged there would require to be either boated at risk and expense or carted through Calcutta, both of which would be most objectionable. The export class of goods require warehouse accommodation where they can be examined and repacked. When these processes are complete, the operation of shipping has to be attended to, and neither a canal site nor even a riverside station at Chitpore, is satisfactory for this purpose for the reason given.

3. Sealdah and Chitpore are already largely occupied by the jute trade. The station there should, in the opinion of the Committee, be applied to that trade, and for the purposes of the goods imported for local consumption.

4. The great bulk of the export goods require riverside accommodation, and this can be obtained by carrying the main

line of railway round Calcutta by way of the South Eastern Railway, which it should leave near the Balligunge station, and thence behind Alipore, on a high level line, to Garden Reach, where for fully three miles below Meteabrooz there is deep water on the river's edge, and excellent mooring for ships of all sizes.

A line of railway running parallel with the river could be accommodated with warehouses suitable for receiving and storing produce, and a series of pontoons could doubtless be arranged for the purposes of shipment.

A great part of this undertaking, namely, the entry of the East Indian Railway into Sealdah, has already been sanctioned by the Government, and doubtless the raising of the necessary capital has been provided for also. The extension which the Committee of the Chamber advocate will require a large sum, probably £1,500,000; but seeing the enhancement of value it must entail on a great area of property in and near Calcutta, and the large traffic it is certain to command, it hardly need be expected that insuperable difficulties will be found in the way of raising the necessary funds.

The Committee look on the cost of this extension as the least difficult part of the undertaking. The great point now in view is to obtain, in the first place, a settled plan, and, in the next, permission to have it carried out. The prolonged delay which takes place before steps are taken to provide for the growth of the trade is a fact that fills this Committee with alarm, and which, in their opinion, has done, and will still do, most serious injury to the country.

DOCKING ACCOMMODATION ACQUIRED BY THE PORT COMMISSIONERS.

The Calcutta Docking Company's Dock and premises having passed into the hands of the Port Commissioners with the view of providing for their own vessels, the shipping of the port has been deprived of docking accommodation hitherto at its disposal, and in reply to the Committee's reference on the subject they were informed that it is believed the Commissioners' vessels will keep the dock constantly occupied, but that if at any time it is not so engaged, and if an outside vessel is in urgent need of docking and cannot find accommodation elsewhere in the port, the Commissioners would probably be able to place their dock at its disposal.

From Chamber to the Port Commissioners.

Calcutta, 8th February 1883.

THE Committee of the Chamber of Commerce learn by Government of Bengal Notification of the 17th of last month, that it is the intention of Government to take up, under Act X of 1870, certain lands at Howrah, including the premises of the Calcutta Docking Company, for the purpose of docking and repairing the several vessels, boats, buoys, &c., the property of the Port Commissioners.

The Committee desire me to inquire if it is the intention of the Commissioners to devote such lands and premises exclusively to the purposes stated in the Notification, or whether the property to be acquired will be used for the general accommodation of the Port, so as to admit of the Calcutta Docking Company's dock, after it has passed into the Commissioners' hands, being available for vessels other than those of the Commissioners, which may require docking accommodation, and which has been hitherto at the disposal of the shipping of the port.

From Port Commissioners to Chamber.

The 27th February 1883.

I am directed to acknowledge recept of your letter of the 8th instant, enquiring whether the Calcutta Docking Company's dock, after it has passed into the Commissioners' hands, will be available for vessels other than those belonging to the Commissioners. The letter was laid before the Commissioners at their last Meeting, and I forward herewith, for your information and that of the Chamber, a copy of the Resolution which was passed thereupon.

Copy of a Resolution passed by the Commissioners at a Meeting held on the 14th day of February 1883.

Read letter from the Secretary to the Bengal Chamber of Commerce, enquiring whether vessels other than those belonging to the Commissioners will be accommodated in the Calcutta Docking Company's docks after the premises have been taken over by the Commissioners.

RESOLVED: That in reply, the Chamber of Commerce be informed that the object which the Commissioners have in view is (as stated in the Notification) to provide accommodation for their own vessels; and it is believed that the number of these vessels will be sufficiently large to keep the dock constantly occupied. If, however, at any time hereafter, the dock is unoccupied by vessels belonging to the Commissioners, and an outside vessel is in urgent need of docking and cannot find accommodation elsewhere in the port, the Commissioners, under such circumstances, would probably not feel themselves debarred from coming to the assistance of the shipping of the port by making their dock available.

HOSPITAL DUES AND PORT CHARGES.

Under the Indian Ports Act an annual statement is published of the receipts and charges of the Port *with the exception of receipts and expenses on account of pilotage;* all port dues are collected by the Port Commissioners on behalf of Government, but there is nothing to shew how the charges for pilotage are appropriated, so that the statement from which these charges are omitted is of relatively little value.

The Committee have represented the expediency of including in such statement the account realised on pilotage account and how it has been

disposed of, but they have had no answers to their letters on the subject.

From Chamber to the Government of Bengal.

Calcutta, 28th November 1882.

In June 1878 the Committee of the Chamber of Commerce placed themselves in communication with the Government of Bengal on the subject of Hospital Dues and Marine Charges, and on the 9th March 1879, a Resolution was recorded by the Honorable the Lieutenant-Governor, in which the estimates of the Marine Department for the year 1877-78 were reviewed, and other questions in connection with Marine expenditure dealt with, and His Honor directed the appointment of a Committee to thoroughly investigate the accounts of income and expenditure.

Under the Indian Ports Act, No. 12 of 1875, it is provided by Section 47, that a distinct account shall be kept, showing in complete detail the receipts and charges of the Port, and an abstract statement of every such account shall be published annually, and the balance at debit or credit of the Port Fund account duly exhibited. It is further provided that all expenses, including the pay and allowances of all persons upon the establishment or the port, the cost of buoys, beacons, lights and other works incurred, shall be charged to such account, *with the exception of receipts and expenses on account of pilotage.*

The Resolution above referred to states:—"The Port Proper has, however, been placed under the Port Commissioners, while the Approaches remain under the Marine

authorities. Some of the receipts and charges appear, therefore, in the accounts of the Port Commissioners and some in the books of the Accountant-General. Under these circumstances great difficulty has been felt in preparing an accurate statement of the Port Fund, such as is required by law ; and it is found equally difficult to check, in the interests of the port, the expenditure upon local establishments, stores, and vessels, which in the marine estimates is amalgamated with that which is more strictly provincial."

The conservancy of the port approaches was transferred to the Port Commissioners from the 1st of November of last year, and the port dues were simultaneously assigned to them.

It would appear that the agency of the Commissioners is employed in the collecting of inward and outward pilotage, lead-money, hospital dues, salvage and other minor items, and these collections are detailed in the Commissioners' Report, which, however, contains no particulars as to how these collections have been appropriated : there is no expenditure account regarding them ; and it seems to the Committee of the Chamber that the complete detail of the receipts and charges of the port—as required by the Act—is of relatively little value if the important account of pilotage receipts and expenditure is excluded.

No reason is assigned for such exclusion, nor why this charge upon the shipping should not be as publicly accounted for as other port dues of lighter incidence and minor importance. If the Port Commissioners' collections in this respect are duly recorded, the Committee apprehend

that no really valid objection can be advanced why the disposal of this source of provincial revenue should not likewise be published by the department to which the Commissioners' collections are transferred.

The Committee respectfully submit for the consideration of His Honor the Lieutenant-Governor that such publication is expedient in the interests of those who contribute such collections; the amount is large, and the expenditure is no doubt large too; but the shipping interests would be satisfied if official accounts showed that they are not called upon to contribute more than is essential to the maintenance of the Pilot Service, in all its departments, in highest efficiency.

The Lieutenant-Governor is well aware that the expenses of this port are so exceptionally heavy that any reduction would be an appreciable relief, and the Committee are confident that His Honor will not hesitate to let the shipping have the advantage of any reduction that may be possible, rather than that any surplus revenue derived from the pilotage of the port should be a source of profit to the Government.

From Chamber to Government of Bengal.

Calcutta, 19th February 1883.

Under date the 28th of November last, I had the honor to submit a representation by the Committee of the Chamber of Commerce relative to the disposal of the inward and outward pilotage collected by the Port Commissioners on account of Government; and

I am now desired to convey the Committee's request that His Honor the Lieutenant-Governor will be pleased to permit the transmission to the Chamber of such accounts as may have been prepared by the Accountant-General showing the expenditure of the amounts realised by the Commissioners in those respects.

TELEGRAPHIC COMMUNICATOIN BETWEEN SAUGOR ISLAND AND EASTERN CHANNEL LIGHT.

The inquiry on this point by the Government of India having been referred to the Chamber, the Committee replied that the proposal had been received with general approval as a means of immediate communication with vessels arriving at the Sandheads, and with the Pilot Station for regulating the supply of Pilots, &c., and that the Meteorological Department would find the line of service in obtaining reports as to the state of the weather from the Channel Light ship.

From Government of India to Chamber.

No. 515 *T. Simla,* 10*th November* 1882.

A proposal having having been made to establish telegraphic communication between Saugor Island and the Eastern Channel Light, I am directed to request that the Government of India may be favored with an expression of your opinion as to the extent to which such communication would be utilized by the shipping.

From Chamber to Government of India.

Calcutta, 30th November 1882.

I am directed by the Committee of the Chamber of Commerce to acknowledge the receipt of your letter No. 515 T, of the 10th instant, relative to the proposed establishment of telegegaphic communication between Saugor Island and the Eastern Channel Light, and the extent to which such communication would be utilized by the shipping.

In reply I am instructed to say that the proposal has been received with general favor by agents for vessels, who are of opinion that opportunity would be taken of its usefulness if masters of vessels were made acquainted with the existence of such communication; this might be made known by sending notices to the Board of Trade London, and other marine establishments in the United Kingdom, and all Indian, Colonial, and foreign ports.

Although it is impossible to say at present to what extent the line would be utilised, the Committee of the Chamber are of opinion that, as the means of communication would be useful in many instances, the ultimate results may be such as to justify its construction and maintenance.

All inward bound vessels would probably make use of the opportunity thus afforded to earlier report their arrival, and vessels waiting for orders at the Sandheads would avoid incurring the risk and delay of proceeding to Saugor for instructions. During the North-East monsoon ships are often detained at the Sandheads for want of tugs, and Captains would in all probability telegraph to their

agents in town. Outward bound vessels could also be communicated with, if necessary, after leaving Saugor.

The line would be especially a great benefit to the Port Officer, who would be in immediate communication with the Pilot Station, and could better regulate the supply of pilots, the want of which was much felt in the last South-West monsoon through the insufficiency of pilot brigs; and it would be of service to those vessels by making their wants known in Calcutta.

The Meteorological Department also would find the line of material service, as the light-ship would be in a more southerly reporting position than Saugor, about which bad weather sometimes hangs when it is comparatively fine south of the Channel light, and in case of cyclonic weather, information might reach Calcutta of the state of matters at the Sandheads and whether the light-vessel remained on its station or not.

CRUISING SERVICE OF PILOT BRIGS AT THE SANDHEADS.

In reply to the Commttee's reference on this subject the Government of Bengal have furnished the Chamber with a statement given below, showing how each Pilot Brig was employed during the past year. It will be seen that of three vessels which constituted the establishment at the beginning of the year, one was condemned in April as unfit for service, and the other two were employed alternately, at short intervals; so that

there was one vessel only on the Pilot Station at a time, instead of two at least for meeting the requirements of shipping throughout all seasons of the year.

From Chamber to Government of Bengal.

Calcutta, 18th November 1882.

I am directed by the Committee of the Chamber of Commerce to submit on their behalf an application for information as to the cruising service performed by the Pilot Brigs during the current year, or, if more convenient, say from the 1st of May last; and the Committee will feel obliged by being furnished with a statement showing how many days each Brig was so employed, when relieved, and length of detention in dock, or otherwise for repairs, re-fitting, re-victualling, and so forth: and any reasons for absence from the Pilot Station, stress of weather, or other circumstances.

The Committee trust His Honor the Lieutenant-Governor will be pleased to direct that they may be supplied with the details now asked for.

From Government of Bengal to Chamber.

Marine, No. 107. *Calcutta the* 16*th January* 1883.

In compliance with the request contained in your letter, dated the 18th November last, I am directed to forward, for the information of the Chamber, a copy of a statement prepared by the Port Officer of Calcutta, showing the manner in which each Pilot Brig was employed during the past year.

Statement showing how each Pilot Brig was employed from 1*st January to* 31*st December* 1882.

Name of Brig.	Number of Days.			Dates.		Number of days on passage to and from station.	Remarks.
	At station.	In town for repairs, &c.	Absence from station on account of weather, &c.	Proceeded to station.	Returned from station.		
"Cassandra" ..	28	..	...	.....	3rd February 1882 ..	6	Left town on 23rd July 1881.
	..	61	..	6th April 1882	.....	2	
	74	..	3	.....	27th June 1882	4	
	..	32	..	30th July 1882	.....	2	
	129	..	3	.....	16th December 1882 ...	6	
	...	15	..	.....	.....	...	
	231	108	6	.....	.....	20	365 days.
"Chinsurah" ..	96	..	..	.....	8th April 1882... ..	2	Left town on 13th November 1881.
	..	15	..	.....	.....	..	Condemned on 24th April1882.
	96	15	...	.....	.....	2	113 days in 1882.
"Coleroon" ..	..	30	..	31st January 1882 ..	.....	2	
	112	..	..	.....	26th May 1882	2	
	..	26	..	22nd June 1882... ..	.....	2	
	109	...	5	.....	18th October 1882 ...	3	On the 13th October *S. S. Quetta* collided with *Coleroon*, injuring bowsprit, &c., which necessitated her coming to town for repairs.
	..	37	...	25th November 1883 ..	.....	3	
	84	..	...	.....	.....	...	
	255	93	5	.....	.....	12	365 days.

Calcutta Port Office,
The 6th January 1883.

A. W. Stiffe, *Lieutenant, late* I.N.,
Port Officer of Calcutta.

From Chamber to Government of Bengal.

Calcutta, 19th February 1883

The Committee of the Chamber of Commerce direct me to acknowledge the receipt of your letter No. 107 of the 16th of last month, and to thank you for the statement prepared by the Port Officer, showing the manner in which each Pilot Brig was employed during the past year.

With this statement before them the Committee are confirmed in their belief that the Brigs require a thorough overhauling, and they feel that they were justified in making the representation contained in their letter of the 20th of August last.

As the *Chinsurah* was relieved on the 8th of April and condemned a few days afterwards, the Pilot Station was served for about 9 months of last year by two brigs only—*viz.*, the *Cassandra* and the *Coleroon*, and practically, by only one at a time; for of these two vessels, the former was 231 days at the station and 108 in town for repairs, &c., the latter 255 days at the station and 93 in town for repairs: and the Committee cannot resist the conclusion, that vessels in need of relief at the short intervals mentioned in the Port Officer's statement and of the long detention in Calcutta for repairs, scarcely fulfil the conditions required for vessels employed in an important service demanding the constant attendance of at least two Brigs at the Pilot Station throughout all seasons of the year.

In the 6th para. of Resolution dated the 30th of August 1881, on the Port Officer's Report for 1880-81, it

is stated that a new vessel had been ordered to replace the *Chinsurah* which had done 22 years' service.

This new brig is no doubt the one referred to in Government of Bengal letter No. 1399 of the 5th September last, para 4, but that addition to the service has not yet arrived, and the Committee have no positive information when the new brig will be on duty at the Sandheads.

At present, therefore, only two Pilot Brigs are available, and if the system of returning to town is continued, the station will be served by one brig only; and as the season for heavy weather is fast approaching, it is essential in the interests of the shipping that due provision be made for their protection as soon as possible.

MAINTENANCE OF STEAM SERVICES IN INDIAN WATERS BY STATE SUBSIDIES.

The Government of India having resolved to terminate the contracts hitherto performed by the British India Steam Navigation Company for the conveyance of mails, of Government stores and passengers from one Indian port to another, and having decided to make other arrangements subject to open competition in order that the charge to Government for postal or political purposes may be considerably lessened, and for freight and Government passengers reduced to a minimum, the opinion of the Chamber was invited on the contemplated changes, and the

Committee submitted their views in the letter which closes the correspondence on the subject.

Government of India, Department of Finance and Commerce.

No. 4493, *Simla the* 25*h October* 1882.

READ the undermentioned correspondence :—

Memorandum from Director-General of Post Offices, No 51, dated 2nd June 1882.

Letter from the Military Department to the Director of the Indian Marine, No. 798, dated 14th July 1882.

Letter from the Director of the Indian Marine to the Military Department, No. 4285, dated 19th September 1882.

Letter to Director-General of Post Offices, No. 4268, dated 11th October 1882.

RESOLUTION.—Under the existing contract with Government, for the maintenance of steam communication in Indian waters, the British India Steam Navigation Company enjoys an almost exclusive monopoly of the conveyance of mails and Government stores and passengers from one Indian port to another, and a large subsidy is annually paid to the Company for the service. One of the objects of the present contract was the encouragement of interportal trade. Desirable as this encouragement may have been in the earlier stages of the trade

of the country, the time has now arrived when he profitable existence of steam communication betwern most Indian ports is possible without Government suppot, and existing arrangements are not only a source of expense to Government, but may tend to retard the development of other steam-ship companies. The Governor-General in Council has therefore resolved to terminate the existing contract on 30th April 1884, and to make any new arrangements that may thereafter be found necessary the subject of open competition. The Director-General of the Post Offices has accordingly been instructed to communicate this decision of Government to the Managing Agents of the British India Steam Navigation Company.

2. The existing lines of steam communication, which are described in the list appended to this Resolution, are maintained either for postal or for military and political reasons, or on general grounds.

3. The Governor-General in Council is of opinion that for postal and political purposes there may be certain lines for the regular maintenance of which it would be expedient to enter into contracts and even to pay moderate subsidies, but that it will not be necessary to enter into any contract for the maintenance of any lines of steam communication on merely general grounds, or to pay any subsidy for the conveyance of troops, Government stores, and passengers to and from any Indian port. For such services it will be advantageous to have recourse to the local freight market as occasion arises. His Excellency in Council is further of opinion that a separate contract should be entered into in respect of each line maintained for postal or political purposes, and that the payment of

subsidy should be confined to as few lines as possible. By such arrangements His Excellency in Council hopes that in future the total amount of annual subsidy will be considerably less than it has been in the past, while the charges for freight and for Government passengers will be reduced to a minimum.

4. Before arrangements are made for inviting tenders for any future contract, the Government of India, however, considers it desirable to settle what lines of steam communication should be maintained, and, if necessary, subsidised, for postal or political reasons. In this view His Excellency in Council requests to be favoured with the advice of the Local Governments and officers concerned with as little delay as possible, in order to enable the Government of India to complete all preliminary arrangements before the end of December next.

ORDERED: that a copy of the foregoing Resolution be forwarded to the Governments of Bengal, Bombay, and Madras; to the Chief Commissioner of British Burma, and to the Director-General of the Post Office of India, for the purpose indicated in paragraph 4.

Ordered also, that the Resolution be communicated for further consideration to the

Military Department.
Foreign Department.
Home Department.
Revenue and Agricultural Department.
Public Works Department.

Secretary to the Government of India.

* The original papers received from the Military Department are herewith returned, copies having been kept for record.

Steam Services maintained by the British India Steam Navigation Company under contract with the Government of India.

Period.	Line.	Ports of Call.	Tonnage and horse-power as provided by the contract.	Remarks.
Weekly ...	Between Calcutta and Rangoon *viâ* Chittagong, &c., (coasting).	Calcutta ... Chittagong ... Akyab ... Kyouk Phyoo ... Sandoway .. Bassein ... Rangoon ...	Steamers of 500 tons gross register and engines of 100 horse-power.	This line takes the place of lines indicated in the contract as Nos. 1 and 2, the change having been made by special arrangement with the Company, under which Akyab got a weekly in lieu of a fortnightly visit. Steamers do not call at Sandoway and Bassein during the south-west monsoon; nor do the steamers call at Bassein on the voyage *to* Calcutta.
Weekly ...	Between Calcutta and Moulmein.	Calcutta .. Rangoon ... Moulmein ...	Steamers of 800 tons gross register and engines of 120 horse-power with option of using a smaller steamer between Rangoon and Moulmein.	This line is provided for as No. 3 in the contract; it works in connection with the following line.
Fortnightly.	Between Moulmein and Singapore.	Moulmein ... Penang ... Malacca ... Singapore ...	Steamers of 800 tons gross register and engines of 120 horse-power.	Line No. 5 of contract; it works with the previous line so as to provide a continuous service from Calcutta to the Straits. Government of the Straits Settlements now contribute towards the maintenance of this line $ 6,000=about Rs. 13,000.

Period.	Line.	Ports of Call.	Tonnage and horse-power as provided by the contract.	Remarks.
Once in five weeks.	Between Burma and the Straits (coasting).	Rangoon ... Moulmein ... Tavoy River ... Mergui ... Malwoon ... Renoung ... Kapah ... Junkseylon ... Penang ...	Steamers of 320 tons gross register and engines of 80 horse-power.	Line No. 4 of contract; the Company availed themselves of the option provided in the contract to make this line a link between lines Nos. 1 and 5 of the contract instead of maintaining a separate service from Calcutta to Singapore.
Fortnightly.	Between Madras and Rangoon (coasting).	Madras ... Masulipatam ... Coconada.. ... Vizagapatam ... Bimlipatam ... Calingapatam ... Barwah ... Gopalpore ... Rangoon ...	Steamers of 800 tons gross register and engines of 120 horse-power.	Line No. 6 of original contract; the Company have the option of working this service once every four weeks or of abandoning it if the Government employs its own steamers to any considerable extent for the conveyance of troops and stores over this line. Calingapatam, Barwah, and Gopalpore are visited only on alternate voyages in the direction from Madras to Rangoon.

Period.	Line.	Ports of Call.	Tonnage and horse-power as provided by the contract.	Remarks.
Weekly ...	Between Calcutta and Bombay (coasting).	Calcutta ... False Point ... Gopalpore ... Calingapatam (*a*) .. Bimlipatam ... Vizagapatam ... Coconada ... Masulipatam (*a*) .. Madras ... Pondicherry (*a*) ... Negapatam ... Galle (*a*) ... Colombo ... Tuticorin ... Colachel (*a*) & (*b*) ... Allepy ... Cochin ... Narrakal (*c*) ... Beypore ... Calicut ... Tellicherry ... Cananore ... Mangalore ... Carwar ... Bombay ...	Steamers of 700 tons gross register and engines of 100 horse-power; but the Company may employ vessels of not less than 500 tons gross register to visit some of the less important ports and connect with the main line.	This line is provided for as No. 7 in the contract. (*a*) On the alternate trips only. (*b*) On voyages *from* Calcutta only. (*c*) During south-west monsoon only.
Semi-weekly.	Between Bombay and Karachi	Bombay ... Karachi ...	Steamers of 500 tons gross register and engines of 100 horse-power.	Called line No. 8 in the contract. It works in connection with the two following lines.

Period.	Line.	Ports of Call.	Tonnage and horse-power as provided by the contract.	Remarks.
Weekly ...	Between Karachi and Busrah (coasting).	Karachi ... Guadur (*d*) ... Muscat (*d*) ... Jask (*d*) ... Bunder Abbas ... Linga ... Bahrein (*d*) & (*e*) ... Bushire ... Fao ... Busrah ...	Steamers of 700 tons gross register and engines of 100 horse-power.	Called line No. 9 in the contract ; the Company have availed themselves of their option to work the line from Karachi as a continuation of the service between Bombay and Karachi. This line connects with line No. 8 above and No. 10 below. (*d*) On alternate trips only. (*e*) Only on voyages in the direction from Karachi to the Gulf.
Fortnightly.	Between Aden and Karachi.	Aden ... ... Karachi	No stipulations ...	This corresponds with line No. 10 of the contract ; but the Company run vessels every fortnight in lieu of once every four weeks, as prescribed in the contract. This line connects with line Nos. 8 and 9 above. The Company avail themselves of their option to work the Persian Gulf portion of contract line No. 10 by means of the vessels running on line No. 9.

NOTE.—The above mentioned services represent the lines of communication formed under the general contract with the Imperial Government, for which a yearly subsidy of Rs. 7,25,000 is paid. But there are other lines maintained by the British India Steam Navigation Company under the foreign and local contracts, or unsubsidised for private interests. So far as they are known, these lines are mentioned below :—

British Contract.—Between Aden and Zanzibar (four-weekly). This contract expires on the 6th December 1882.

Portuguese Contract.—Between Lisbon and Delagoa Bay (four-weekly). This contract expires in 1883.

Queensland (*Australia contract*)—Between London and Brisbane (four-weekly).

Local (*Burma*) *Contract.*—Rangoon to Tavoy, Mergui and back (fortnightly).

Ditto. Between Rangoon and Moulmein. From Rangoon every Tuesday, and from Moulmein every Friday.

Private Unsubsidised Line.—Between London and Calcutta, calling at Colombo and Madras (fortnightly).

Ditto. Between Bombay and Aden (four-weekly).

It should be borne in mind that the recently concluded Port Blair contract with the Asiatic Steam Navigation Company will also expire on the 30th April 1884. Also that the contract between the Secretary of State and the Euphrates and Tigris Steam Navigation Company for the conveyance of mails between Bagdad and Busrah will expire on 30th April 1884.

No. 1521.

Copy forwarded to the Secretary to the Bengal Chamber of Commerce, for the favour of the opinion of the Chamber on paragraph 4 of the letter.

By order of the Lieutenant-Governor of Bengal,

C. S. BAYLEY,

Offg. Under-Secretary to the Govt. of Bengal.

CALCUTTA;
GENERAL DEPT.—*Marine,*
The 23rd November 1882.

57

8

From Chamber to Government of Bengal.

Calcutta, 20th December 1882.

I have submitted to the Committee of the Chamber of Commerce Government of India letter No. 4493 of the 25th October, received with your office No. 1521 of the 23rd November, relative to the question as to what lines of steam communication in Indian waters should be maintained and subsidised by the State for postal or political purposes.

From the statement attached to the Government letter it would appear that the various lines of service under contract with the Government are almost exclusively confined to one Company, and the Committee are consequently not in a position, without considerable reference, to say whether the whole of the lines can be maintained if dependent on the support of traders only.

Assuming that communication between Calcutta and all or most of the places named in the statement can be maintained without subsidy from Government, the question arises as to whether this communication will be so regular and reliable as to be available to the Government for postal service purposes. The Committee are inclined to believe (but as stated above they cannot without considerable reference speak with confidence) that without a contract or subsidy of some sort, there would probably be no guarantee of fixed dates of sailing or arrival, and the regularity of calls at particular ports would depend on inducing circumstances.

Steamship owners would naturally be led by the demands of trade from which they derive profit or avoid loss, and

would not necessarily consider the convenience of the Government or of the postal service.

The reference which you have been so good as to submit to the Chamber involves points of importance which do not affect Calcutta to the extent which would be felt by Rangoon and other coast ports; and the Committee are therefore of opinion that it would be desirable to obtain the views of the communities more directly concerned for submission to the Government of India.

CONVENTION BETWEEN GREAT BRITAIN AND THE UNITED STATES RELATING TO MERCHANT SHIPPING.

The opinion of the Chamber having been requested as to the probable operation and effect on Native Seamen and British Indian shipping in the United States of certain provisions of the proposed Convention, the Committee submitted that Indian interests would be scarcely affected, and that as the number of vessels owned and registered in India trading to America, or likely to trade there, is so small their special interests did not call for consideration.

From Government of Bengal to Chamber.

Marine—No. 526. *Calcutta the 7th March* 1883.

I am directed to forward a copy of a letter from the Assistant Secretary to the Government of India, in the

Department of Finance and Commerce, No. 944, dated the 28th February 1883, with enclosures, on the subject of a proposed Convention relating to merchant shipping between Great Britain and the United States, and to request that, at a very early date, the Lieutenant-Governor may be favoured with an expression of the opinion entertained by the Chamber as to the probable operation and effect of the Convention on Native Seamen and British Indian Shipping in the United States.

From J. E. O'CONOR, ESQ., *Assistant Secretary to the Government of India, Department of Finance and Commerce, to the Secretary to the Government of Bengal, No.* 944, *dated Calcutta the* 28*th February* 1883.

I AM directed to forward herewith copy of a despatch from Her Majesty's Secretary of State, No. 7, dated the 18th January 1883, and enclosures, specifying the bases which have been proposed by Her Majesty's Government for the negotiation of a Convention relating to merchant shipping between Great Britain and the United States. In the event of a Convention being concluded on these bases, it is proposed to insert in the Convention a clause making it applicable to British India, subject to local legislation if necessary.

2. His Excellency the Governor-General in Council will be glad to be favoured with an expression of the opinion entertained by His Honor the Lieutenant-Governor of Bengal as to the probable operation and effect of the proposed Convention on native seamen and British Indian shipping in the United States. I am to request a very early reply to this letter.

From the Secretary of State for India, to the Government of India. No. 7, dated 18th January 1883.

Herewith is transmitted a copy of a letter* (with enclosures) from the Foreign Office regarding a proposed Convention relative to merchant shipping between Great Britain and the United States. It is stated in the letter that British India will be invited to become a party to the Convention, and I request that I may accordingly be furnished, for communication to the Foreign Office, with an early expression of the views of your Government on the matter.

*Dated 18th December 1882.

From T. V. LISTER, ESQ., *Under-Secretary of State for Foreign Affairs, to the Under-Secretary of State for India, No. 2753-R.S. & C., dated 18th December* 1882.

I am directed by Earl Granville to transmit to you, to be laid before the Earl of Kimberley, copies of a despatch which His Lordship has addressed to Her Majesty's Minister at Washington, instructing him to propose certain bases for the conclusion of a Convention relating to merchant shipping between Great Britain and the United States.

I am to state that in framing these proposals, due regard has been had to the bearing which they will have on British India, and that a second despatch, of which I am also to enclose a copy, has been addressed to Mr. West, instructing him to inform the United States Government that British India will be invited to become a party to the Convention which, if concluded, should contain a

clause stipulating for its extension accordingly, subject, where necessary, to local legislation, and to the consent of the dependency in question.

I am therefore to request you to move the Earl of Kimberley, should His Lordship see no objection, to ascertain the opinion of the Indian Government on the question, furnishing them with copies of this correspondence, and asking them for an early expression of their views on the matter.

Copy of a despatch from the Secretary of State for Foreign Affairs, to Her Majesty's Minister at Washington.

Since the receipt of your despatch No. 111 (Commercial) of the 16th December last, Her Majesty's Government have had under their careful consideration the question of concluding with the United States a Convention relating to merchant shipping; and I now transmit to you a memorandum embodying their views on the subject, and containing the bases on which they would be prepared to enter upon negotiations with the Government of the United States.

You will observe that this memorandum is divided into three heads, as follows:—

1.—The provisions of English Acts relating to merchant shipping, which Her Majesty's Government could at once, without legislation, apply to United States' ships in British ports.

2.—The provisions of United States' law which Her Majesty's Government would be glad, subject to the consent of Parliament, to see applied to British ships in United States' ports.

3.—Suggestions for dealing with the question of vexatious suits brought at the instance of seamen against masters and ship-owners.

With regard to the first head, no further observations appear to me to be requisite.

As to the second, Her Majesty's Government would be glad to learn, in the first place, how far the United States' Government would be disposed to meet their views in this respect, in order that they might judge what powers it would be needful to obtain from Parliament before a Convention containing such provisions could come into effect.

As to the third head, it is shown that legislation would be required in Great Britain before perfect reciprocity could be granted by Her Majesty's Government with regard to this branch of the question; and if the United States' Government should refuse to enter into any engagement on this point, unless Her Majesty's Government could guarantee perfect reciprocity, it might be possible that provisions of such a nature might be framed and agreed to in principle, and inserted in a Convention with the condition that there operation would be suspended until an Act could be passed to enable Her Majesty to enter into such an agreement.

Speaking generally, Her Majesty's Government do not see any difficulty in applying, by Order in Council, to United States' ships any of the British Merchant Shipping Acts which the Government of the United States may be desirous of having so applied, nor in limiting their application so as to make the consent of the Consul of

the nation of the offender necessary to the validity of legal proceedings under such order.

Many matters of detail would require to be discussed and settled, but Her Majesty's Government would be glad to find that the United States' Government were willing to accept the points set forth in this memorandum as an acceptable basis of negotiation.

Her Majesty's Government have been induced to confine their proposals to a somewhat limited area, in the hope that it may be possible at the present moment to come to an arrangement with regard to some at least of the matters urgently affecting the shipping interests of both countries, leaving for future and separate consideration other cognate points, such as the application of the sections of the Merchant Shipping Acts dealing with the more serious classes of offences; for instance, misconduct endangering ship or life and limb, and not rendering assistance to a vessel after collision.

With regard to another matter frequently treated of in Consular Conventions, *viz.*, the personal privileges and immunities of Consuls, I may add that Her Majesty's Government have under consideration a draft Bill on this subject; but that for various reasons it has been considered best to treat this branch of the subject apart. Should, however, this Bill assume a practicable shape, I shall not fail to make a communication to you on the subject.

You will, on receiving this despatch, lose no time in submitting the enclosed memorandum to the United States' Government; and you will invite them to take it into their consideration, and to favour you with an early expression of their views as to its forming an acceptable basis of negotiation.

Memorandum.

I.

The provisions of English Acts relating to merchant shipping which it would at present be possible to apply to United States' ships, and the further provisions which enable them to be so applied, are shewn in annex I. to this memorandum.

It will be observed that there are three separate enactments which give the power of applying certain provisions of English law to foreign ships.

(*a.*) "The Foreign Deserters Act, 185[illegible]," which enables Her Majesty to make an Order in Council, under which seamen belonging to foreign ships may be apprehended and carried on board their ships, and by which penalties are also imposed on persons who harbour deserters from such foreign ships as have the benefit of the Act.

This, however, can only be done where reciprocal advantages are given to British ships in the foreign country. Under this Act arrangements have been made with most foreign countries, and there would be no difficulty in making an arrangement under it with the United States.

(*b.*) The Act 39 and 40 Vict. cap. 80, sec. 37 (1876) contains a much wider power. It enables Her Majesty to make an Order in Council applying any of the provisions of the Merchant Shipping Acts, 1854 to 1876, or of any Act amending the same, to the ships of any foreign country whose Government desires that they shall be so applied, with or without limitation.

No reciprocity is expressly required by this Act, but in offering to the United States to make an arrangement with

them under it, Her Majesty's Government would, of course, expect the Government of the United States to give to British ships in United States' ports advantages of a similar kind.

The enactments of the Merchant Shipping Acts, any of which may, under this section, be applied to United States' ships, are very extensive and multifarious, but those which concern the present subject are, it is believed, extracted in the annex.

They are sections 148, 207, 243, 247 and 257 of the Act of 1854, and sections 5, 6 and 10 of the Act of 1880, 43 and 44 Vict., cap. 16. These provisions, with the exception of sections 5 and 6 of the Act of 1880, relate either to punishments for desertion and breach of discipline, or to penalties for tempting to desert and harbouring deserters.

The former are contained in section 243 of the Act of 1854, and are as follows :—

1. Desertion.
2. Neglecting or refusing, without reasonable cause, to join a ship, or to proceed to sea, and absence without leave.
3. Quitting a ship without leave after her arrival in port.
4. Wilful disobedience to any lawful command.
5. Continued wilful disobedience, and continued wilful neglect of duty.
6. Assaulting officers.
7. Combining to disobey or neglect duty, or to impede the navigation of the ship or the progress of the voyage.

8. Wilful damage to ship, embezzlement of, and wilful damage to, stores or cargo.

9. Smuggling, causing loss or damage to master or owner.

It appears from a comparison of certain provisions of the law of the United States and that of Great Britain, contained in annex 2 to this memorandum, that they are almost identical as to the punishment of these offences, and that little difficulty will be found in making a reciprocal arrangement with regard to most of them, on the principle that the punishment of seamen is not in any case to exceed that which could be inflicted under the law of nation of the ship to which they belong.

With regard, however, to the most important, because most common, of these offences, *viz.*, desertion and kindred offences, a further point is raised by a recent enactment, 43 and 44 Vict., cap. 16, section 10, by which imprisonment for (*a*) desertion, (*b*) neglecting or refusing to join a ship or to proceed to sea, and for absence without leave, is abolished in the United Kingdom.

Her Majesty's Government could not, therefore, any longer exercise, in the case of United States' ships, a power of imprisoning seamen for desertion in the United Kingdom, which power cannot be exercised in the case of British ships.

But they could give United States' ships the benefit of this same section 10, of "The Merchant Seamen (Payment of Wages and Rating) Act, 1880" (43 and 44 Vict, cap. 16), under which the master of a ship, the mate, the owner, the ship's husband, or the consignee is

empowered to call upon the police to assist him in conveying a deserter on board, or to bring him before a Magistrate without first applying for a warrant, and also of section 247 of the Act of 1854, under which a Court before which a seaman is brought for desertion can cause him to be conveyed on board his ship.

The portion referred to of the section of the Act of 1880 runs as follows:—

"Whenever, either at the commencement or during the progress of any voyage, any seaman or apprentice neglects or refuses to join, or deserts from, or refuses to proceed to sea in any ship in which he is duly engaged to serve, or is found otherwise absenting himself therefrom without leave, the master or any mate, or the owner, ship's husband, or consignee may, with or without the assistance of the local police officers or constables, who are hereby directed to give the same if required, convey him on board: Provided that if the seaman or apprentice so requires he shall first be taken before some Court capable of taking cognizance of the matters to be dealt with according to law; and that if it appears to the Court before which the case is brought, that the seaman or apprentice has been conveyed on board or taken before the Court on improper or insufficient grounds, the master, mate, owner, ship's husband, or consignee, as the case may be, shall incur a penalty not exceeding 20*l.*; but such penalty, if inflicted, shall be a bar to any action for false imprisonment."

Section 247 of the Act of 1854, omitting the words repealed by the Act of 1880, runs as follows:—

"Whenever any seaman or apprentice is brought before any Court on the ground of his having neglected or refused to join, or to proceed to sea in any ship in which he is engaged to serve, or of having deserted or otherwise absented himself therefrom without leave, such Court may, if the master, or the owner, or his agent so requires, cause him to be conveyed on board for the purpose of proceeding on the voyage, or deliver him to the master or any mate of the ship, or the owner, or his agent, to be by them so conveyed, and may in such case order any costs and expenses properly incurred by or on behalf of the master or owner by reason of the offence, to be paid by the offender, and, if necessary, to be deducted from any wages which he has then earned, or which by virtue of his then existing engagement he may afterwards earn."

It will be observed that the above clauses, if applied to United States' ships, will cover considerably more ground than "The Foreign Deserters Act, 1882." The clause of "The Merchant Shipping Act, 1854," relating to the harbouring of deserters, is also larger in its operation than the corresponding clause of the Foreign Deserters Act, as it extends to the offence of enticing to desert, and inflicts a heavier penalty.

It is as follows:—

"257. Every person who, by any means whatever, persuades or attempts to persuade any seaman or apprentice to neglect or refuse to join, or to proceed to sea in, or to desert from his ship, or otherwise to absent himself from his duty, shall for each such offence, in respect of each such seaman or apprentice, incur a penalty not exceeding 10*l.*; and every person who wilfully harbours or secretes

any seaman or apprentice who has deserted from his ship, or who has wilfully neglected or refused to join, or has deserted from his ship, knowing, or having reason to believe, such seaman or apprentice to have so done, shall, for every such seaman or apprentice so harboured or secreted, incur a penalty not exceeding 20*l*.

There are numerous other clauses in the Merchant Shipping Act, especially in Part 3 of the Act of 1854, which apply to seamen in British ships, and which might, if the United States' Government so desire, be applied to United States' ships by virtue of section 37 of 39 and 40 Vict., cap. 80, but the above are, it is believed, the most important.

The third and last Act, which enables Her Majesty's Government to apply British law to foreign ships, is the Acts 43 and 44 Vict, cap. 16, to section 10 of which alalusion has already been made in connection with the arrest of deserters. It remains to consider sections 5 and 6. The former of these sections is an enlargement of section 237 of the Act of 1854, which is intended to prevent crimps and runners from going on board, and tempting men before they go ashore to be paid off. This section can only be applied to foreign ships where the foreign country has made similar provisions in respect of British ships.

It will be observed that the Orders in Council to be made under the three different Acts above referred to would often cover the same ground; and when the views of the United States' Government have been ascertained, it can be determined in what form these orders shall be made. It is probable that, under section 37 of the Act of 1876, it will be possible to make an order including

all such provisions as the United States' Government may desire.

II.

Having thus stated the extent to which Her Majesty's Government find themselves able to extend remedies for the existing state of things to United States' merchant ships, it remains to be considered what the Government of the United States' could apparently give in return to British ships.

It appears that the United States' Act of the 7th June 1872 is in a great measure a transcript of the British Merchant Shipping Act. Some, if not all, of these clauses are set out in the annex to this memorandum, but it would be desirable to have the United States' Statutes carefully looked through, to see if they comprise all that is necessary.

Two limitations would be required by Her Majesty's Government:—

(*a*)—That no proceedings be instituted under these clauses against the master or crew of a British ship without the consent of the Consul.

(*b*)—That no penalty be inflicted on the master or any of the crew of a British ship larger than could be inflicted on him under the English Statutes for a like offence.

There exists, however, a difficulty in embodying in a Convention stipulations for the application to British ships in United States' ports of the clauses of United States' Act of the 7th June 1872, alluded to.

Under such an arrangement British subjects would be liable to be proceeded against and punished in United States' Courts, and Her Majesty's Government would be giving their express sanction to this proceeding. The English Statutes referred to in part I of this memorandum do not give Her Majesty's Government the power to give this sanction, though they enable Her Majesty to make Orders in Council applying British law to foreign subjects.

Her Majesty's Government believe that they would not be justified in making an arrangement such as that now under discussion without the express consent of Parliament.

The difficulty, however, is one which does not affect the advantages which Her Majesty's Government propose to give to the United States, but those which the United States may give in return.

Her Majesty's Government would then desire, in the first instance, to learn what advantage the United States' Government are willing to offer in this respect, leaving for after consideration the question what powers it may subsequently be thought desirable to apply for to the British Parliament with the view to their application to British shipping.

III.

Advantageous, however, as a Convention embodying the above points would be, it could not be expected to remedy the most serious grievance of which British ship-owners and masters complain in the ports of the United States, *viz.*, the vaxatious and oppressive actions at law against ship-owners, and the attachment of ships, generally

when ready for sea, commenced and issued in the name of deserters, but in reality at the instance of unworthy persons who have seduced them from their ships and their duty.

No Convention relating to shipping and seamen would be thoroughly satisfactory to Her Majesty's Government which did not afford a guarantee that the Courts of the United States would recognize as valid, contracts made between a master of a British ship and his crew in accordance with British law, and would not interfere with that contract except upon clear and proper grounds.

In order to secure this it would be necessary to insert in the Convention a stipulation, that no American Court shall entertain any civil proceeding by a seaman against the master or owners of a British ship, or against the British ship, without the consent of the British Consul.

To enter into reciprocal engagements on this subject would require legislation in Great Britain, but the following are some reasons why the Government of the United States may fairly be asked to give such guarantees to Great Britain, on the understanding that similar guarantees will be granted to her as soon as the consent of the Legislature can be obtained.

There are, it is believed, no grievances suffered by American shipping in this country by vexatious legal proceedings similar to those suffered by British shipping in American ports. Notwithstanding the absence of an arrangement between the two countries, the Courts of Admiralty in the United Kingdom do not in practice act without the cognizance of the American Consul, or

without considering duly any representation he may make; and it is believed that other Courts follow the same practice. Suits for wages or for compensation of alleged injuries, instituted on behalf of seamen employed in foreign ships, are rarely brought, and the detention of ships on frivolous and unsupported charges is unknown. No complaint has been made of a British Court refusing to recognize a contract duly entered into between the master and seamen of a foreign ship, and it may be fairly said that the benefits which Her Majesty's Government now seek to obtain for British ships in American ports are now practically accorded to American ships in British ports without any Convention at all.

From the Secretary of State for Foreign Affairs, to Her Majesty's Minister at Washington.—No. 25; Consular, dated the 18th December 1882.

With reference to my preceding despatch of this series, I have to inform you that due regard has been had to the bearing which the proposals I have instructed you to make for the negotiation of a Convention relating to Merchant Shipping will have upon British India for the Colonies.

Although Her Majesty's Government are in a position to guarantee the application of certain provisions of the British Merchant Shipping Act to United States' ships only when in the ports of the United Kingdom, they are about to invite the Governments of British India and of the self-government Colonies to extend the operation of any Convention which may be concluded to India and Colonial ports by means, when necessary, of local

legislation; and it is believed that no difficulty is likely to be raised to such an extension of its operation, as an arrangement of this description would be one for the benefit of both parties, and would be consistent with what has been already done in certain of the British Colonies.

You will, therefore, in submitting to the United States' Government the memorandum inclosed in my preceding despatch, furnish them with explanations on this branch of the question, and you will bear in mind that any Convention which may eventually be agreed upon should contain a clause stipulating for its extension to British India and the Colonies subject, when necessary, to local legislation, and in those cases only where such extension is desired by the Colony.

From Chamber to the Government of Bengal,

Calcutta, 18th April 1883.

I have submitted to the Committee of the Chamber of Commerce your letter No. 526 of the 7th ultimo with its annexures, on the subject of a proposed Convention relating to Merchant Shipping between Great Britain and the United States.

The Committee have duly considered the whole question as set forth in the papers accompanying your letter, giving special attention to the point submitted in Government of India letter No. 944 of 28th February, *viz.*, the probable operation and effect of the proposed Convention on Native Seamen and British Indian Shipping in United States ports; and I am desired to say in reply, that the

Committee believe one great grievance under which British vessels at present labor in those ports would be alleviated if the point referred to in para. 2 of section 3 of the Memorandum attached to the Despatch from H. M.'s Secretary of State for Foreign Affairs to H. M.'s Minister at Washington be conceded; but they think care should also be taken, if possible, to ensure that greater hardships than those now complained of do not result from giving the American Courts powers over masters of British vessels, even if the masters are protected by Consular assent being required to any proposed action against them.

As to the Government of India being made a party to the proposed Convention by the introduction of a clause extending its operation to this country, the Committee are of opinion that Indian interests are hardly affected; the number of vessels owned and registered in India trading to America, or likely to trade there, as far as can be foreseen, is so small, that they do not think their special interests require consideration.

However, while the Committee consider it a matter of comparative indifference to Indian ship-owners what legislative action is taken, they think that if a concession on the part of the Indian Government is required to advance the general interests of the Empire, the concession should be promptly made.

THE INSOLVENT DEBTORS ACT.

The Committee have again been in correspondence with the Government of India on this

important subject, and called attention to defects in the present law of insolvency which affect the interests of the mercantile community. They have suggested various amendments, the adoption of which will, they believe, improve the existing system of dealing with fraudulent and dishonest debtors.

From Chamber to the Government of India.

Calcutta, 11th April 1883.

Under cover of Government of Bengal letter No. 718J., of the 14th February 1881, the Committee of the Chamber of Commerce received a copy of a Bill to amend the Law relating to Insolvent Debtors in India, regarding the provisions of which the Chamber's opinion was requested, and they submitted their views in their reply of the 1st of the following month.

The Committee represented that while the Bill professed to deal with some important points, others of equal, if not greater concern to the commercial public had apparently been altogether ignored: that the Bill was not a full and sufficient measure of legislative redress of the evils which called for a remedy; and that as a far more comprehensive measure, framed so as to meet the requirements of the time, was necessary, the Chamber deprecated the passing of the Bill in the form then presented.

It has been recently urged upon the attention of the Chamber that in the interests of the mercantile community of Calcutta, in common with those of the rest of

India, the Law of Insolvency should be not only amended but altogether recast; and various reasons have been assigned, some of which the Committee now place before the Government for consideration, as illustrating the defects which it is expedient to remedy.

The first is, that the present Act contains no adequate machinery for dealing with fraudulent and dishonest debtors, of which there are amongst the native community generally, and specially among the Bazar dealers, a very large proportion, as the experience of European merchants has found to be the case.

The remark by Sir Barnes Peacock, during the time he was Chief Justice of Bengal, that in India a man's troubles begin when he obtains a decree in a Civil Court is perfectly just, and the truth of which is made more and more manifest in every year that passes; and it may be stated broadly, but with perfect accuracy, that assuming, as in the vast majority of instances it may be safely assumed, that a judgment-debtor has the inclination to resist the enforcement of a decree against him, and has means for such resistance, there is practically no adequate machinery provided by the law for compelling him to pay.

This is due to the great prevalence of *benamee* transfer of property, and the falsification of vernacular accounts which it is next to impossible to detect if opportunity is given to the debtors to have it done with anything like skill.

Another reason why the present Insolvency Law should be amended is that the officers of the Court have not sufficient power to enable them to secure the books and property of an insolvent if removed or concealed, or to com-

pel the attendance of an insolvent who absconds; and the result of this is that in almost every one of the numerous cases in which persons adjudicated insolvents have absconded, taking away with them or otherwise fraudulently disposing of property at their disposal, their creditors have been unable to obtain any redress whatever. And, in this connection, it should be borne in mind that an insolvent has only to cross the Hooghly Bridge or the Mahratta Ditch, into the District of Hooghly on the one hand, or the 24-Pergunnahs on the other, to set the process of the Insolvent Court at defiance; while the neighbouring French Settlement of Chandernagore, which can be reached within an hour's travelling from Calcutta, also enables an insolvent to defy his creditors and the Court with impunity, even if the powers of the Court were increased so as to enable its process to reach beyond Calcutta.

Other defects in the law, as experience has proved, are that persons who do not come within the definition of *traders* under the Act can be adjudicated only after lying in jail for 21 days in execution of a decree, and also that by availing himself of the facilities for obtaining time to file his schedule, which the Insolvent Act and the practice of the Court in working it allow, an insolvent can tire out his creditors and force them to accept almost any terms he may choose to offer. This is done constantly.

These defects seem to the Chamber to call for remedy in the following directions:—

(1.) the enlargement of the powers and jurisdiction of Insolvent Courts so as to admit of an insolvent being readily followed and compelled to surrender his books and property and to appear in Court;

(2.) by the introduction of provisions similar to those contained in Section 89 of the Bankruptcy Act of 1869, with the addition of a penal clause in case of an insolvent absconding ;

(3.) by the provision of summary power in the Court to arrest and imprison debtors who fail to make the fullest possible disclosure of their affairs, and

(4.) by facilitating the adjudication by creditors, especially in cases of non-traders.

All these provisions would, in the judgment of the Chamber, greatly improve the present Law.

In the event of the Law being recast, it would probably prove advantageous in many cases of mercantile failures, for the Act to contain provisions somewhat analogous to liquidation by arrangement, as in complicated mercantile cases a majority of creditors are often anxious to avoid resorting to the cumbrous machinery of the Court, but are compelled to do so by a small minority—perhaps, of one creditor; but while this would be no doubt advantageous in many cases, it would be expedient to surround it with due safeguards to prevent the possibility of such occurrences as packed meetings for the purpose of withdrawing the affairs of an insolvent trader from the consideration of the Court in cases where a fair proportion of creditors might hold a resort to the Court desirable.

The Committee of the Chamber submit these observations for the attention of Government, in the hope that when the Bill to amend the Insolvent Debtors Act comes again under review, the opinions now expressed may be duly considered.

PROPOSED LEVY OF FEES FOR CLEARANCE OF VESSELS AFTER ORDINARY WORKING HOURS.

It will be seen from the Committee's reply to the Government of Bengal that they have recorded their objection to the imposition of any addition to the heavy charges already borne by the shipping of the Port.

From Government of Bengal to Chamber.

Marine—No. 1942: *Calcutta, the* 27*th Decr.* 1882.

The Port Officer of Calcutta has represented to the Government that inconvenience is felt by his establishment in consequence of the frequent presentation of applications for clearances of vessels after the ordinary working hours, and has asked for permission to charge a fee, similar to that levied at the Custom House, on such clearances.

2. The Lieutenant-Governor is disposed to agree in the opinion of the Port Officer that a charge might fairly be imposed on clearances after office hours; but before taking any action in the matter, he would wish to be favoured with an expression of the opinion of the Chamber, whether it would be preferable that all applications received after 5 P.M. on ordinary days, and 3-30 P.M. on Saturdays, should be refused, or that they should be granted on payment of an overtime fee of Rs. 16.

From Chamber to the Government of Bengal.

Calcutta, 16th January 1883.

The Committee of the Chamber of Commerce direct me to acknowledge the receipt of your letter No. 1942 of the 27th of last month, relative to the proposed charge of an overtime fee of 16 rupees on applications for port clearance after 5 P.M. on ordinary days, and 3-30 P.M. on Saturdays, or the alternative to refuse such applications after those hours.

The Committee having referred your letter to some of the largest consignees of steamers and sailing vessels are informed that, as a rule, applications for clearance are made in ample time to admit of the work being completed during ordinary office hours; and that it is only in exceptional cases of urgency, and especially where the intervention of foreign Consuls is indispensable in obtaining the the various documents required for clearance, that unavoidable delays occur involving late applications.

While it has been represented to the Committee that rather than have their vessels detained and their owners exposed to consequent hardship and loss, some agents would prefer paying a fee, (which they think should not exceed 10 rupees) a strong objection has been expressed to the imposition of any new fee in connection with the clearance of vessels, as well as to the alternative proposed by the Government of refusing applications after hours; and it has been submitted that, in the place of any obstruction to the important business of getting vessels their port clearance, every facility should be afforded, even if the

Port Officer's department had occasionally to be in attendance a little later than usual.

For their own part the Committee are unable to countenance the fee system at all, for they regard it as a vicious means of protracting public business so as to render overtime work essential to its completion: and having regard to the large revenues derived in various ways from the shipping of the port, the Committee consider that the charge for such overtime work may be fairly debited to the departments concerned.

Before taking action, however, the Committee would suggest that a record be kept for the ensuing three months of the applications made after office hours, in order to determine with accuracy the extent of the inconvenience complained of, for the answers to their inquiries do not lead them to believe that such hardship to the employes in the Port Office is involved as would warrant the imposition of a further burden on the heavily taxed shipping in this port.

DETENTION AT BUDGE-BUDGE OF VESSELS WITH CARGOES OF PETROLEUM.

The inconvenience to which vessels were exposed of being detained a few miles from Calcutta in consequence of the absence of the certificate of quality of petroleum on board, required under the orders of the local Government, having been brought to the notice of the Chamber in a letter from the Consul-General for the United States

to the Government of India, the Committee pointed out that the detention complained of might have been obviated if the necessary declaration of quality had been previously made by the ship's agents, or by the presentation to the Port authorities of the American certificate which, under Notification of the Bengal Government, may be accepted for the purpose of admitting petroleum under the rules for regulating its importation.

From Government of Bengal to Chamber.

No. 659, *Calcutta, the* 30*th November* 1882.

In forwarding the accompanying copy of a letter No. 1683, dated the 25th instant, and its enclosures, from the Government of India, relative to the inconvenience said to be occasioned to importers of petroleum from the operation of the rules framed by this Government to regulate the importation of petroleum, I am directed to say that the Lieutenant-Governor will be glad to be informed what measures the Chamber of Commerce would recommend in order to remove the hardship alluded to by the Consul-General.

From Govt. of India to Govt. of Bengal.

No. 1683, *dated Fort William,* 25*th Novr.* 1882.

I am directed to forward the accompanying letter from the Consul-General of the United States, America, on the subject of the rules framed by the Government of Bengal to regulate the importation of petroleum, and to request that, with the permission of His Honor the Lieutenant-Governor, steps may be taken, if necessary, to remove the hardship brought to notice by the Consul-General.

* No. 112, dated 4th November 1882, addressed to the Government of India, in the Foreign Department.

From Consul-General, United States, America, to Government of India.

No. 112, *Calcutta,* 4*th November* 1882.

I have the honor to bring to your notice certain rules established by the Hon'ble Lieutenant-Governor of Bengal in relation to the importation of petroleum, dated July 18th, 1882, a copy whereof is hereto annexed, marked A, and to inform you that said rules have caused and are liable again to cause considerable hardship to the commerce of the United States in this, to wit :—

1. That the said rules require the Master of a ship carrying petroleum to Calcutta to produce to the pilot before reaching Budge-Budge a certain certificate as to the quality of his cargo before he is allowed to proceed beyond Budge-Budge. Although in fact most of the ships carrying petroleum from the United States to Calcutta this season had already sailed before said rules were pro-

mulgated, or before the Master had had reasonable time to acquire notice or knowledge of them, therefore, making a compliance impossible.

2. The Notification, dated August 18th, 1882, supplementary to said rules, allowing a certain other certificate in the form employed by the Inspectors of the New York Produce Exchange to be accepted until further notice, while evidently intended to cover such cases as above mentioned, does not always afford the relief needed, because ship-masters have heretofore not been required to furnish even that certificate at this port, and are therefore not necessarily prepared to do so hereafter unless they had notice before sailing.

As illustrative of the operations of the rules against American ships, I have the honor to submit herewith copy marked "B" of a letter from Charles H. Sawyer, Master of the American ship *Memnon*, which was detained at Budge-Budge from the evening of the 14th till noon the 17th instant, at large expense for extra pilotage and towage, besides loss of time.

Inasmuch as other ships under like circumstances with the *Memnon* are now on their way to this port with cargoes of American petroleum, and as I feel assured that the Government of India, as well as that of the Presidency of Bengal, is desirous of giving every fair and reasonable facility to the commerce between India and the United States of America, I respectfully ask your consideration of the matter, and, if it shall be found just and reasonable, such relief or modification of the rules as will enable ship-masters in charge of American cargoes to comply with them without unusual detention or expense.

Ships loaded with American petroleum are expected here in a short time, hence I have the honor to ask as early attention to the subject as may be convenient.

Copies of the rules have been forwarded to the State Department in Washington, and ship-masters will no doubt receive notice in due time, so that a temporary modification would only be required.

From Captain Sawyer, American ship "Memnon," to Consul-General for America.

Calcutta, October 30th, 1882.

I would respectfully call your attention to the following facts relating to the detention in the river Hooghly of the American ship *Memnon*, of Boston, under my command, from New York for Calcutta, laden with kerosine oil.

The *Memnon* sailed from New York on the 6th of June 1882, and arrived at the Sandheads on the evening of the 12th instant, where she was boarded and taken in charge by a Calcutta Pilot who brought her to anchor at Saugor at 9. A.M. on the 13th. On the morning of the 14th instant, took a steam tug and proceeded up the river until 5 o'clock of same day, when by orders of the Pilot the ship was brought to an anchor abreast of Budge-Budge, the Pilot arranging with the Captain of the steam tug to get under weigh at an early hour on the following morning and proceed up to Calcutta.

On the following morning, the 15th instant, the Pilot refused to get the ship under weigh showing an order from the Bengal Government, dated 18th of July 1882,

requiring all vessels loaded with kerosine oil, bound to Calcutta, to have on board a certificate from the port of shipment showing that the oil is not dangerous. In default of this certificate the vessel is to remain at Budge-Budge until the oil can be tested.

As the *Memnon* sailed from New York six weeks before this order was issued, you will readily see that it could not possibly apply to her, therefore the detention must be unjust. The ship was detained from the evening of the 14th instant to noon of the 17th, besides large expense of extra pilotage, towage, &c.

In view of these facts, I therefore ask that you will take such steps in this matter that I may be enabled to obtain redress for this detention of my ship and for the expense attending thereto.

From Chamber to Government of Bengal.

Calcutta, 7th December 1882.

The Committee of the Chamber of Commerce direct me to acknowledge the receipt of your letter No. 659 of the 30th ultimo, and its enclosures, on the subject of the rules which regulate the importation of petroleum, and of a representation made by the Consul-General for the United States to the Government of India as to the hardship which those rules have caused, and are liable again to cause, to American vessels carrying petroleum to this port.

The Committee of the Chamber are of opinion that the Consul-General for the United States has accurately

stated the effect of the rule, published under Bengal Notification of the 18th July, as regards the detention of vessels at Budge-Budge, which must result so long as their commanders are not able to make the required declaration, or their agents, or the consignees of the cargo are not in possession of the certificate granted at the port of shipment in the form employed by the Inspectors of the New York Produce Exchange, which, under Bengal Notification of the 18th of August, may be accepted for the purposes of the said rules.

In the case of the ship *Memnon* submitted by the Consul-General, it appears to the Committee of the Chamber, that in the absence of the master's necessary declaration, the Pilot was bound to act as he is reported to have done; but at the same time it would appear that the detention complained of might have been obviated if the agents of the ship or the consignees of the petroleum, in anticipation of the vessel's arrival, had communicated with the Port Authorities and obtained their sanction, on production of the American certificate (in their possession) to the vessel being brought up to the usual place for discharging petroleum.

With regard to future arrivals the Committee are of opinion that there should be no difficulty whatever, as parties engaged in the petroleum trade are assumed to be aware of the facility which the Resolution of 18th August affords; and by the timely presentation of the American certificate to the Port Authorities no detention should arise.

REDUCTION OF RAILWAY RATES FOR CARRIAGE OF PETROLEUM.

The Committee publish an interesting memorandum on this question which was submitted to them by Mr. Libby, of New York, who took much pains in promoting the petroleum trade, and they have the satisfaction of reporting that the East Indian Railway Company are prepared to introduce lower rates and more favorable conditions with the view to increase the trade in that article.

From Chamber to E. I. Railway and E. B. Railway Companies.

Calcutta, 1st February 1883.

THE accompanying Memorandum in reference to reduced railway freights for Petroleum in India has been recently submitted to the Committee of the Chamber of Commerce by Mr. W. H. Libby, of New York, who, in behalf of corporations and firms representing about 90 per cent. of petroleum exported from the United States, has been taking much interest in the general question of promoting that oil trade with this port.

Mr. Libby's views having been submitted to the principal importers of petroleum into Calcutta, I am directed to submit for your information the minutes recorded by those parties, with a request that you will be so good as let the subject have your attention, and to favor the

Committee of the Chamber with the result of your consideration.

A MEMORANDUM

In reference to Reduced Railway Freights for Petroleum in India.

A Railway management, in reaching a decision concerning a suggested reduction of freight rates upon any important commodity of transport, are naturally governed by the following considerations :—

(*a*) Is the existing rate unduly excessive?

(*b*) Is the commodity safe and convenient for transport?

(*c*) Is there a relative preponderance or deficit in freight for the localities to which the said commodity is destined?

(*d*) Would the proposed reduction of rate stimulate increased business to an extent imparting the principle of mutuality to the concession?

By way of comments on—

(*a*) A very considerable proportion of the refined petroleum of commerce is manufactured in New York and vicinity, the crude product having been first transported by railways and pipe-lines 500 to 700 miles from the producing localities; labor, and the value of the oil lands and machinery being the leading elements of first cost. In New York the crude product is then refined amid all the accessories of valuable land, vast and expen-

sive machinery, labor, chemicals, fuel, waste and all concomitants incidental to a great manufacturing business. It is then packed in tin and wood (and so perfectly that the average loss on cargoes to the distant Oriental ports is less than one per cent). It is then loaded on vessels and consigned to a voyage of four months and upwards, and subjected to freight, insurance, and other charges incidental to ocean carriage, and has finally been delivered in Calcutta at as low a cost to the importer as Rs. 3-6 per case.

The distance from Calcutta to Lahore is about 1,300 miles. For purposes of rough calculation, a case containtwo tins of refined petroleum weighs about a maund. At the risk of the owner, the rate of carriage for petroleum is one half pie per maund per mile. 1,300 miles at ½ pie per maund per mile, is therefore about Rs. 3-6 per case. Aside, therefore, from the intermediate profits of commerce, the cost of petroleum at Ladore becomes about Rs. 6-12 per case, of which *one-half* is represented by the railway charges from Calcutta. All other considerations aside, do not these figures appear unduly burdensome on commerce and consumer?

(*b*) While the question as to whether any given product is desirable for transport must depend largely on opinion or prejudice to determine, it seems pertinent to record the following concerning American petroleum :—

1*st*.—European and American railways accept it in barrels, without reservation, although leakage is more probable, and handling more difficult than when packed in tins and boxes as in India.

2nd.—At far greater expense than if in barrels, petroleum is packed in tins and boxes with special reference to tropical climates, easy stowage, and coolie handling.

3rd.—After long and careful investigation, the Indian Government imposed a higher standard of test than is exacted by other tropical countries.

4th.—Such trifling leakage as might be unavoidable could not prove more damaging to railway freight carriages than to steamships, very few of which now decline to transport petroleum, while the large number of vessels loaded with petroleum leaving American shores every year, are re-loaded with almost every variety of foot and fabric.

5th.—Before properly packed petroleum can become ignited, the wooden box must first be in flames, and the fire prolonged to an extent that the oil within the tins becomes so extremly hot that its expansion forces open the tins and thus exposes the oil to the flame. The oil then fulfils its natural mission, and *burns*. Examples are, however, quite frequent of the box being partly or wholly consumed without igniting the oil. There are certainly many products that pass unquestioned, that are far more susceptible to easy ignition than petroleum. Carriers in India should recognize that petroleum must be heated to about 120° before it will take fire, and then only in contact with flame or the electric spark, and the distinction should then be noted between *ignition* which *does* take place, and *explosion* which does *not*.

(*c*) Only incidental reference is needed in this connection to the important fact, that the preponderance of

freight is largely from the interior to the seaport, and therefore added freight, from seaport to interior, is much desired, and should be encouraged whenever practicable. Better more petroleum and fewer empty cars.

(*d*) While the extent of increased transport that will attend a lessened rate of carriage must of course be somewhat conjectural, the following observations seem pertinent :—

1*st*.—Experience has evidenced in all countries of the world that the cheapening of petroleum has not only increased the *number* of consumers, but the average quantity consumed by each. This has been notably the case in countries where the masses of the people have been very poor.

2*nd*.—The consumption of petroleum in India has been by far the largest at the seaports, or in localities economically accessible therefrom.

3*rd*.—It is the unanimous opinion of merchants, both European and Native, both at the seaports and in the interior, that reduced rates of transportation would *materially* increase trade.

4*th*.—In the smaller Oriental countries like Java and Japan, where the interior is accessible and the transporation economic, the largest consumption per capita has been reached. The following figures for 1881 are worthy of attention :—

Country.	Population.	Total Consumption Cases.	Per Capita.
Java	19,500,000	1,300,000	1 case to each 15
Japan	36,000,000	1,400,000	1 „ „ 26
India	240,000,000	1,000,000	1 „ „ 240
China	360,000,000	650,000	1 „ „ 554

It should be specially noted that where the per capita consumption is the most favorable, the masses of the people are the poorest and almost exclusively agricultural, there being among the natives of Java no wealthy and influential commercial class as in India. Should Indian consumption attain the Java per capita, there would be 12,000,000 cases instead of 1,000,000 annually consumed; and the fact should also be noted that Java consumption is still increasing. The *present* ratio of consumption at the Indian seaports if extended to the interior, would bring a most important increase of business to the railways. India has about one-fifth of the population of the world, while her consumption of petroleum was only about one-sixtieth of the world's consumption of 1881.

While the prediction might be unwarranted and the prophecy might prove irrational that the Indian consumption would ever tally per capita with that of Java, the figures are highly suggestive—almost *conclusive*—that under fostering transportation and legislative influences a most important increase is attainable.

Recommendations.

A.—That petroleum is entitled to, and should receive *first* classification hereafter.

B.—That at the expiration of any given year, each shipper who can produce the customary receipts, evidencing that he has shipped during the said year_____ cases shall receive a rebate of_____per cent., and if _____thousand cases a *further* rebate of_____ per cent.

This would prove a great incentive to the Native merchants to increase their interior business to an extent necessary to secure the rebate, and if the business *were* so increased, the Railway could well afford the payment of the rebate, and thus the principle of *mutuality* would be established.

Finally.—The probabilities of a satisfactory outcome to the Railways seem sufficient to induce the management to give these recommendations at least a year's trial. Such a decision would appear judicious; such an experiment could not prove disastrous.

WM. H. LIBBY,
(of New York City.)

Calcutta, 17th January 1883.

From East Indian Railway Company to Chamber.

Calcutta, 5th March 1883.

I am much obliged to you for the copy of the Memorandum by Mr. W. H. Libby, forwarded with your letter of the 1st ultimo, regarding railway rates for the carriage of kerosine oil. I am quite of opinion with Mr. Libby that lower rates and more favorable conditions will tend to increase the trade in this article, and we had already the matter under consideration before receipt of your communication.

The rate and conditions hitherto in force on the E. I. Railway for kerosine oil have been—

(*a*) 50 pies per 100 maunds per mile.

(*b*) despatches allowed from Howrah only on three days of the week.

(*c*) prepayment of freight.

We now propose to introduce the following more favorable terms.

(*a*) A rate of 33 pies per 100 maunds per mile for consignments of not less than 260 maunds and not more than 280 maunds, or multiples thereof. This condition is necessary to secure full wagon loads. The rate proposed will be equivalent to a reduction of Rs. 82 per 100 maunds on the distance from Howrah to Delhi, or a reduction of 32·8 per cent.

(*b*) It will be arranged for despatches to be made each day of the week.

(*c*) Prepayment of freight will not be compulsory.

The introduction of the above charges at an early date is now under consideration.

PROPOSED RULES FOR THE IMPORTATION, POSSESSION AND TRANSPORT OF PETROLEUM.

From Government of Bengal to Chamber.

No. 23 $\frac{RT}{M.}$ *Dated Yacht "Rhotas," 18th August* 1882.

I am directed to forward for an expression of the Chamber of Commerce two sets of rules framed under the Petroleum Act of 1881, one set under section 7 to regulate the importation of petroleum, and the other under section 9 to regulate the possession and transport of petroleum.

2. The rules under section 7, as they stand, were published in the Calcutta Gazette of the 19th ultimo, and I am to explain that this was done for the purpose of giving some legal power to the Government of staying the

arrival of dangerous importations within the limits of the Port. The Lieutenant-Governor quite recognizes the tentative character of these rules and the probability of modifications, upon which the Chamber's advice will always be valuable, being found necessary. A set of supplementary rules have, since the date of the Gazette publication, been drawn up regarding the sampling and testing of petroleum, and these are also forwarded for an expression of the views of the Chamber.

No. 6 (*a*) to 6 (*h*).

3. I am at the same time to send a copy of a letter from the Port Officer, Calcutta, No. 3009, dated the 25th ultimo, in which he objects to Budge-Budge as the place for stopping ships, and recommends Diamond Harbour for the purpose instead, and I am to say that the Lieutenant-Governor will be glad to have the opinion of the Chamber on this point.

4. A form of the certificate to be supplied at the port of shipment to the master of a vessel carrying petroleum is forwarded. But as some time must elapse before importers can obtain certificates in this form at the place of export, and as the rules will be inoperative without some form of certificate, the Lieutenant-Governor has directed the publication of a notification in the Calcutta Gazette declaring that, until further notice, certificates granted in the form employed by the Inspectors of the New York Produce Exchange will be accepted.

I have the honor to be,

SIR,

Your most obedient servant,

C. MACAULAY,

Secretary to the Govt. of Bengal.

NOTIFICATION.

The 18th July 1882.—In exercise of the powers conferred by section 7 of the Petroleum Act, 1881, the Lieutenant-Governor of Bengal is pleased, with the previous sanction of the Governor-General in Council, to make the following rules to regulate the importation of petroleum :—

PRELIMINARY.

1. (1) All words and expressions used in these rules and defined in the Act shall in these rules have the meanings respectively assigned to them by the Act.

(2) In these rules—

"Petroleum declared dangerous" means petroleum which the master of a ship has declared under rule 2 to be dangerous petroleum.

"Certificated petroleum" means petroleum covered by a certificate granted at the port of shipment, of such description as the Local Government may, from time to time, by written order prescribe, and to the effect that the petroleum is not dangerous petroleum.

"Uncertificated petroleum" means petroleum which the master of the ship has not declared under rule 2 to be dangerous petroleum, and which is not covered by a certificate as aforesaid.

"Petroleum reported dangerous" means petroleum stated in a report signed by the Chemical Examiner to Government, and deposited in the office of the Port Commissioners, to be dangerous petroleum.

"Petroleum reported not dangerous" means petroleum stated in a report as aforesaid not to be dangerous petroleum.

IMPORTATION AT CALCUTTA.

2. The master of every ship bound for Calcutta and carrying petroleum shall, before reaching Budge-Budge, declare in writing to the pilot*—

(a) what quantity of petroleum the ship is carrying?

(b) whether any, and if so, what part of it is dangerous petroleum; and

(c) whether any, and if so, what part of it is certificated petroleum.

Where the master declares that any petroleum is certificated petroleum, he shall produce to the pilot the certificates covering the same.

3. A ship having on board any petroleum declared dangerous shall not proceed upwards beyond Budge-Budge until that petroleum has been discharged.

4. A ship having on board any uncertificated petroleum shall not proceed upwards beyond Budge-Budge until that petroleum has been either discharged or reported not dangerous.

5. A ship having on board only certificated petroleum, or petroleum reported not dangerous, or both, may proceed upwards as far as Meteabrooz Ghât, but shall not

* The pilot should deliver this declaration to the harbour master or his assistant when the latter comes on board.

proceed further until that petroleum has been discharged, unless the quantity of the petroleum does not exceed 500 gallons, in which case she may proceed to any mooring in the port.

6. (1) When a ship is stopped at Budge-Budge under rule 4, or at Meteabrooz Ghât under rule 5, the Superintendent of River Police, or one of his assistants, shall as soon as possible go on board and obtain samples—in the former case, of all the uncertificated petroleum, and if there is certificated petroleum on board which, together with the uncertificated petroleum, amounts to more than 500 gallons, of that certificated petroleum ; in the latter case, of all the petroleum on board which has not been reported not dangerous.

(2) The master shall give to the Superintendent or his assistant a sample of every variety of petroleum comprised in the petroleum of which samples are to be taken under clause (1), and shall, if the Superintendent or his assistant so require, take those samples from the particular receptacles indicated by him.

(3) The Superintendent or his assistant shall forthwith seal the receptacles containing the samples, and having labelled them with the name of the ship, the name of the consignee, and such other distinguishing marks as may be necessary, shall forward them to the Chemical Examiner for report ; and the Chemical Examiner, having tested them, shall sign a report declaring that they are or are not dangerous petroleum (as the case may be), and forward that report to the office of the Port Commissioners, where it shall be deposited.

7. If the petroleum declared or reported dangerous, or both together, on board a ship exceed 40 gallons, no portion of that petroleum shall be landed unless the whole of it is covered by an import license granted under section 4 of the Act.

8. If the uncertificated petroleum on board a ship exceeds 40 gallons, no portion of it shall be landed until the Chemical Examiner's report in respect of it has been deposited in the office of the Port Commissioners as hereinbefore provided.

9. If there is on board a ship uncertificated petroleum in respect of which the Chemical Examiner's report has not been deposited as hereinbefore provided, and also petroleum declared or reported dangerous, and the aggregate exceeds 40 gallons, no portion thereof shall be landed unless the aggregate is covered by an import license granted under section 4 of the Act.

10. If the certificated petroleum on board a ship exceeds 500 gallons, no portion of that petroleum shall be landed unless it is reported not dangerous.

11. When petroleum is landed within the port—

(1) it shall be landed only in covered cargo-boats, and after sunrise and before sunset;

(2) if landed on the Calcutta bank of the river, it may be landed at Nemuck Mahal Ghât, or at any ghât or landing-stage lower down the river;

(3) if landed on the Howrah bank of the river, it may be landed at the ghât immediately to the east of the Royal Botanical Gardens;

(4) it shall not, without the written permission of the Port Commissioners, be landed at any other ghât than those named above.

(5) No smoking, fire, or light of any description shall be allowed in any cargo-boat during the time that the petroleum is on board the boat.

12. All petroleum landed at the ghât on the Howrah bank of the river, mentioned in Rule 11, shall be carried at once from the boat in which the petroleum has been conveyed to the ghât (without being deposited or stacked on the ground) to the north side of the gate leading into the Botanical Gardens, and shall not be deposited or stacked within 50 yards to the north of a line drawn through the pillars of that gate.

13. When the petroleum declared or reported dangerous, or both, on board a ship amounts to more than 40 gallons, and is not covered by an import license granted under section 4 of the Act, and the master desires to proceed above Budge-Budge, the Local Government may if it thinks fit, grant to any person a license to possess that petroleum at such place for such time, and subject to such undertaking by such person for the re-exportation of that petroleum at the expiration of that time as it thinks fit; and may, notwithstanding any thing hereinbefore contained, permit that petroleum to be landed and delivered to that person in such manner and subject to such conditions as it thinks fit.

IMPORATATION AT OTHER PORTS.

14. The master of every ship conveying petroleum shall, on entering a port in the Lower Provinces of Bengal

other than the port of Calcutta, give intimation of the quantity and description of the petroleum to the Magistrate of the district, and shall not allow more than three gallons of dangerous petroleum to be removed from the ship for delivery to any one person, except upon the production by the consignee or his agent of a license under section 4 or section 5 of the Act (as the case may be,) to possess the same.

GENERAL.

15. Nothing in the foregoing rules applies to petroleum comprised in a ship's stores and manifested as such, provided it is not of unreasonably large amount. If any question arises as to whether any petroleum manifested as ship's stores is of an unreasonably large amount, the decision thereon of the Port Commissioners in Calcutta and of the Magistrate of the district elsewhere shall be final.

COLMAN MACAULAY,

Secy. to the Govt. of Bengal.

IN exercise of the powers conferred by section 9 of the Petroleum Act, 1881, the Lieutenant-Governor of Bengal is pleased, with the previous sanction of the Governor-General in Council, to make the following rules to regulate the granting of licenses, to possess and transport petroleum in cases where such licenses are by law required :—

1. All words and expressions defined in the Act and used in these rules shall have in these rules the meanings assigned to them respectively by the Act.

2. These rules shall extend, so far as they apply to dangerous petroleum, to all the territories administered by the Lieutenant-Governor of Bengal, and so far as they apply to other petroleum only to

(1) the town and port of Calcutta;
(2) the Municipality of the Suburbs of Calcutta;
(3) the North Suburban Municipality;
(4) the South Suburban Municipality;
(5) the Municipality of Howrah, and
(6) any other municipality or place to which the Lieutenant-Governor may, by written order, publish in the *Calcutta Gazette*, declare them to be applicable.

3. Licenses for the possession of petroleum within the town of Calcutta shall be granted only when the premises intended to be used for the storage of the petroleum fulfil the following conditions, *viz.*, when the building itself is constructed of masonry with terraced or iron roofs, and with tiled or paved or earthen floors; when the door-ways and openings of the building are built up to a height of not less than two feet above the level of the road or street, or when the floor is sunk at least two feet below the level of the road or street, so that the petroleum cannot flow out of the premises in case of fire; and when the premises are separated by a clear open space of 20 feet on every side from any other building, provided that the licensing officer may, for special reasons to be stated in writing, dispense with this condition.

4. Licenses for the possession of petroleum in places outside the town of Calcutta shall be granted only when the premises intended to be used for the storage of the

ptreoleum fulfil the following conditions, *viz.*, when the building itself is built of brick or earth, no inflammable materials being used in the construction of any portion thereof, except the doors ; when the premises are separated by an open space of at least 20 feet on every side from any other building ; and when the building is surrounded by a wall or earthen embankment not less than four feet high, with a trench close to and completely surrounding the building, of sufficient capacity to hold all the petroleum stored, and to prevent its escape beyond the limits of the trench in case of fire.

5. The licensing officer, or any police-officer of or above the rank of Head Constable appointed by him, may enter any premises in respect of which licenses for the possession of petroleum have been granted, for the purpose of inspecting the same at any time after sunrise and before sunset.

6. The licensing officer, or any police-officer as aforesaid may require a sample to be delivered to him from any receptacle containing petroleum stored in any licensed premises. The procedure prescribed in sections 10 and 11 of the Act shall apply to any demand for samples made under this rule, and to the testing of such samples.

7. Applications for licenses for the transport of petroleum shall specify the description and quantity of the petroleum to be transported, and the places from and to which, and the route by which the petroleum is to be conveyed, and shall describe the receptacles in which the petroleum is to be contained.

8. All petroleum transported under a license shall, if it be conveyed in carts, be transported after sunrise and before sunset, and shall in all cases be packed in air-tight tin or other vessels not easily broken, or in stoppered bottles.

9. It shall be the duty of all police-officers to see that the petroleum is carried only during the time mentioned in rule 8, and by such route as may be specified in the license; and any such officer may stop and inspect any petroleum in transit.

10. Licenses for the possession or transport of dangerous petroleum in quantities exceeding 40 gallons will be granted, subject to the provisions of section 4 of the Act, under the signature of the Secretary to the Government of Bengal in the Municipal Department, on the recommendation of the Commissioner of Police if the application for the license is made in Calcutta, or of the Commissioner of the Division if the application is made elsewhere.

Applications for such licenses should be made through the Commissioner of Police, Calcutta, or the Divisional Commissioner, as the case may be.

Licenses for the possession or transport of dangerous petroleum in quantities not exceeding 40 gallons, and licenses for the possession or transport of other petroleum, will be granted in Calcutta by the Commissioner of Police or Deputy Commissioner of Police, and elsewhere by the Magistrate of the district, or by such other officer as the Local Government may from time to time, by an order in writing, appoint in this behalf.

11. The following fees shall be charged for licenses under the Act :—

	Rs.
License for the possession of dangerous petroleum in quantities exceeding 40 gallons (section 4); for every 40 gallons or fraction of 40 gallons ...	5
License for the possession of dangerous petroleum in quantities exceeding 3 gallons, but not exceeding 40 gallons (section 5)	3
License for the transport of dangerous petroleum in quantities exceeding 40 gallons (section 4); for every 40 gallons or fraction of 40 gallons ...	4
License for the transport of dangerous petroleum in quantities exceeding 3 gallons, but not exceeding 40 gallons (section 5)	2
License for the possession of other petroleum—	
When the quantity to be stored does not exceed 2,000 gallons	25
When the quantity to be stored exceeds 2,000 gallons, but does not exceed 10,000 gallons ...	50
When the quantity exceeds 10,000 gallons but does not exceed 20,000 gallons	100
For every additional 10,000 gallons	50
Licenses for the transport of other petroleum—	
When the quantity does not exceed 10,000 gallons.	1
When the quantity exceeds 10,000 gallons ...	5

12. Save in cases to which section 4 of the Act is applicable, the licensing officer may in his discretion grant a license for the possession or transport of such quantity of petroleum as he thinks fit.

13. Every license for the possession of petroleum in any premises shall specify the maximum quantity of petroleum which may be stored in those premises.

14. Every license for the transport of petroleum shall specify the place from which the petroleum is to be conveyed, the route to be followed, the quantity of petroleum covered by the license, and the time for which the license is in force.

15. Licenses for the possession of petroleum shall be in force for one year from the date of the grant of the license, provided that the licensing officer may, at any time, for good and sufficient reason, cancel a license.

16. Licenses for the transport of petroleum shall be in force for such period not exceeding three months from the date of the grant of the license as may be specified in the license.

17. Licenses granted under these rules shall be in the forms, and shall have endorsed on them the conditions respectively prescribed for them in the schedule hereto annexed.

Every such license shall, on the breach of any such condition, be forfeited.

18. Every application for the renewal of a license for the possession of petroleum shall be made in the same manner as an application for an original license.

Every such application shall be made at a date not less than 15 days before the date on which the orignal license expires. The same fee shall be charged for the renewal of a license as for a new license.

SCHEDULE.

Forms of Licenses.

A.

LICENSE FOR TRANSPORT OF DANGEROUS PETROLEUM GRANTED UNDER SECTION 4 OR SECTION 5 OF ACT VIII OF 1881.

No. Fee Rs.

LICENSE is hereby given to of to transport cases containing in all gallons of dangerous petroleum from to , subject to the rules and conditions on the back of this license, and by the following route, namely :—

The amount of petroleum in each case is stated below.

This license shall continue in force only till the day of 188 .

Secretary to Government.

Commissioner or Deputy Commissioner of Police. / *Magistrate of the District.* } In the case of the transport of dangerous petroleum in amount not exceeding 40 gallons.

Endorsement on Form A.

RULES.

[*Here enter rules under section 9 of the Act.*]

CONDITIONS

1. The petroleum shall be carried in $\frac{\text{covered boats.}}{\text{carts}}$

2. No smoking, fire or light of any kind shall be permitted on the $\frac{\text{boats}}{\text{carts}}$ in which the petroleum is carried.

3. The license-holder is prohibited from delivering any quantity exceeding three gallons to any one who has not a license under section 4 or 5 of the Act. For the delivery of any quantity of petroleum not exceeding three gallons, he must observe the conditions of sections 5 and 6 of the Act.

4. Should the Commissioner of Police or Magistrate through whose jurisdiction the petroleum may pass, consider it necessary to send a guard with the petroleum covered by this license, the license-holder shall pay for the guard.

B.

LICENSE TO POSSESS DANGEROUS PETROLEUM GRANTED UNDER SECTION 4 OR SECTION 5 OF ACT VIII OF 1881.

No. Fee Rs.

LICENSE is hereby granted to

for the storage in the premises described below of gallons of dangerous petroleum subject to the rules and conditions on the back of this license.

Description of premises above referred to.

Secretary to the Government of Bengal.

Commissioner or Deputy Commissioner of Police or Magistrate of the District. } When the amount of petroleum does not exceed 40 gallons.

Endorsements on Form B.

RULES.

[*Here enter rules under section 9 of the Act.*]

CONDITIONS.

1. No goods of a combustible nature shall be stored in the licensed premises.

2. No cask or other receptacle containing petroleum shall be opened, or the oil drawn off, within the building in which the petroleum is stored.

3. No smoking, light or fire in any form shall be permitted at any time within such building.

4. If the licensing officer calls on the holder of the license, by a notice in writing, to execute any repairs of the licensed premises, which may, in the opinion of such officer, be necessary for the safety of the premises, the holder of the license shall execute the repairs within such period, not being less than one week from the date of the receipt of the notice, as may be fixed by the notice.

5. The license-holder is prohibited from delivering any quantity of dangerous petroleum exceeding three gallons to any one who has not a license under section 4 or 5 of the Act. For the delivery of any quantity of such petroleum not exceeding three gallons, he must observe the conditions of sections 5 and 6 of the Act.

C.

LICENSE TO POSSESS PETROLEUM OTHER THAN DANGEROUS PETROLEUM.

Granted under section 8 of Act VIII of 1881.

No. Fee Rs.

LICENSE is hereby granted to
for the storage in the premises described below of
gallons of petroleum subject to the rules and conditions on the back of this license.

Description of the premises above referred to.

Commissioner, or
Deputy Commissioner of Police,
District Magistrate,

The 18 .

Endorsement on Form C.

RULES.

[*Here enter rules under section 9 of the Act.*]

CONDITIONS.

(1) No goods of a combustible nature shall be stored in the licensed premises.

(2) No cask or other receptacle containing petroleum shall be opened, or the oil drawn off, within the building in which the petroleum is stored.

(3) No smoking, light or fire in any form shall be permitted at any time within such building.

(4) If the licensing officer calls on the holder of the license, by a notice in writing, to execute any repairs of the licensed premises which may, in the opinion of such officer, be necessary for the safety of the premises, the holder of the license shall execute the repairs within such period, not being less than one week from the date of the receipt of the notice, as may be fixed by the notice.

D.

No. Fee Rs.

LICENSE TO TRANSPORT PETROLEUM OTHER THAN DANGEROUS PETROLEUM.

Granted under section 8 *of Act VIII of* 1881.

LICENSE is hereby granted to
to transport cases of petroleum
from to
subject to the rules and conditions mentioned on the reverse, and by the following route, namely :—

This license shall continue in force only till the day of 188 .

Dated *Commissioner or*
Deputy Commissioner of Police,
of 18
District Magistrate.

Endorsement on Form D.

RULES.

[*Here enter rules under section* 9 *of the Act.*]

CONDITIONS.

1. The petroleum shall be carried in covered boats carts.

2. No smoking, fire or light of any description shall be allowed in the $\frac{\text{boats}}{\text{carts}}$ in which the petroleum is being carried.

ANNEXURE III.

6. (*a*) The ordinary rule for testing cargoes of certificated petroleum shall be to test one case in 5,000. As soon as the first case is tested, if the petroleum is reported not dangerous, it shall be conditionally passed, *i. e.*, permission to land and remove the cargo shall be given, but it shall be the duty of the police to obtain another case as soon as about 5,000 cases have been landed, and subsequent cases in the same proportion as the lower portions of the cargo are reached. As long as these successive tests are satisfactory, the landing and removal of the cargo may proceed without impediment, but if any case is found to contain petroleum flashing below 73° by Abel's test, the conditional pass shall be withdrawn, and further landing and removal shall be at once stopped.

6. (*b*) Six cases shall then be taken for examination from the part of the cargo which included the case which contained oil flashing below 73°, and if they all contain oil coming up to the standard, the case which failed may be overlooked as an exceptional case, and the landing and removal of the oil may proceed as before.

6. (*c*) Should, however, one or more of the six cases also contain oil flashing below 73°, the cargo, or that portion of it which is still unremoved, shall be declared a mixed cargo, that is, a cargo of certificated petroleum

some of which when tested does not satisfy the test in Calcutta.

6. (*d*) The owner or consignee of a mixed cargo may at his discretion (*a*) remove the cargo by ship from Calcutta, or (*b*) convey not less than 5,000 cases to be selected at his discretion below Budge-Budge, there to be dealt with as petroleum reported dangerous.

6. (*e*) Should he elect the second alternative, the testing of the remainder of the cargo shall be proceeded with as in rules 6 (*a*) to 6 (*c*), the residue of the petroleum being passed or rejected in accordance with the results of subsequent tests.

6. (*f*) For uncertificated petroleum, if the case first tested is found to contain petroleum flashing at or above 73° by Abel's test, the vessel may then come up to Metiabrooz Ghât, and rules 6 (*a*) to 6 (*c*) shall then apply to the testing and landing of the cargo. (This, if accepted, will render some alteration necessary in rule 4. It is probable, however, that uncertificated petroleum will rarely be imported.)

6. (*g*) In determining the flashing point of a case of petroleum under the above rules, the Chemical Examiner shall take the mean of not less than four experiments. Should the oil flash on first withdrawal of the slide at a temperature of 66°, this flash shall not be accepted. Only clear and distinct flashes shall be counted, and doubtful flashes rejected.

6. (*h*) The petroleum shall be tested so as to determine the flashing point, as it is in the case. So far as prac-

ticable no exposure to the air shall be allowed in removing the oil for testing.

(Sd.) . H. L. HARRISON,
Commissioner of Police.

(True Copy.)
(Sd.) R. C. CHATTERJEE,
Head Assistant.

From the Port Officer to the Secretary to the Government of Bengal, General Department, Marine, No. 3009, *Fort William, Port Office, Calcutta the 25th July* 1882.

SIR,

I have the honour to submit, with reference to the Notification published at page 617, part I. of the Calcutta Gazette of 19th July 1882, that I consider Budge-Budge would be a most unsuitable place to anchor ships at for several days unless fixed moorings were laid down. It is now used as an anchorage for ships going down river, anchoring for the tide; it is narrow, and a ship at anchor and swinging, would render the navigation difficult.

2. I would recommend that ships should be at Diamond Harbour, where swinging moorings might be laid down by the Commissioners for Making Improvements in the Port of Calcutta.

I have, &c.
(Sd.) A. STIFFE, *Lt. late I. N.*,
Port Officer of Calcutta.

(True Copy.)
(Sd.) R. C. CHATTERJEE,
For Head Assistant.

Certificate to be supplied to the master of a vessel carrying petroleum to ports in British India.

Name of vessel.

Name of Master.

Cargo consigned to

Amount of petroleum on board gallons contained in tin cases, barrels, or iron drums.

Brand of Petroleum.

Manufactured by

Flashing point determined by means of a verified Abel's Petroleum apparatus, according to the instructions contained in the Indian Petroleum Act of 1881 by the examination of samples drawn from vats holding gallons each or tins, &c., &c.

Number of tests made with each sample.

Highest and lowest flashing point of each sample.

(Sd.)

Dated *Certified State Annalist of*

Certified that the above flashing point determinations refer to the petroleum consigned to Messrs. of ex and leaving on the

(Sd.)

Petroleum Refiners.

Petroleum shipped under "fine" or "open" test flash point determinations, will be treated as uncertificated.

From Chamber to Government of Bengal.

Calcutta, 4th January 1883.

In reply to your letter No. 747 of the 30th ultimo, I am now able to transmit herewith the reply of the principal importers of petroleum to the reference submitted to them by the Committee of the Chamber on the subject of the rules under the Petroleum Act VIII of 1881, to which you drew attention in your letter of 18th of August last.

The Committee instruct me to express regret at the delay which has taken place in answering that communication, but they have not been able until now to advise you of the views entertained by those engaged in the Petroleum trade.

In forwarding the original letter received from those parties, the Committee direct me to submit with it a copy of the letter addressed to the Chamber by Mr. Libby of New York.

To The Secretary, Bengal Chamber of Commerce.

Calcutta, 30th October 1882.

We have the honor to acknowledge receipt of your letter of 30th September last, calling attention to a letter from the Government of Bengal, dated 18th August, respecting two sets of rules framed under the Petroleum Act of 1881, and requesting an expression of opinion upon the same for the consideration of Government.

One set of these rules is intended, under section 7, to regulate the importation of petroleum, and one set

under section 9, to regulate the transport and possession of petroleum.

As you are aware, the firms mostly interested in this trade have recently addressed to the Government of Bengal a memorial on the subject, which deals with the question upon a more comprehensive scale, and, as we have reason to think, will commend itself to the Government, considering the magnitude this trade is likely to assume. If the largeness of this trade is once recognised, we have no doubt the Government will reconsider these rules, which as now framed are more intended for a local retail business, than to meet the requirements of the present, and far less the expansion of the future, in this branch of our commerce.

We consider it of the first necessity that rules for regulating this trade should be divided, as regards—

(*a*)—importation.

(*b*)—transportation.

(*c*)—possession.

(*a*)—The memorial referred to has fully set forth what we consider as an immediate necessity—a large commodious Depôt, with proper appliances for landing, and suitable laboratory arrangements for testing petroleum; and jetties and moorings, at the locality indicated, to facilitate the discharge of vessels.

(*b*)—The memorial has further suggested the requirements for transportation of the oil from the depôt, except such portion as is intended for the local retail trade in and near Calcutta, *viz.*, the connection by a line of Railway with the general railway system to Northern

and Eastern Bengal, and with the completion of the bridge at Hooghly, with the N.-W. Provinces. A suggestion has been thrown out, that such connection should lead from Sealdah viâ Ballygunge, Alipore, Garden Reach to Meteabrooz Depôt; the future extension of trains by such a line would follow, as a matter of course, to the contemplated central station in Calcutta.

In this memorial Sealdah has been chosen as the connecting link, because a large quantity of petroleum finds at present an outlet to Northern and Eastern Bengal, partly by rail—partly by the Eastern Canal route; and by making a halting station at or near Sealdah, goods intended for boat transport to Eastern Bengal could be brought to the Canal, without the streets of Calcutta and suburbs being constantly encumbered, and partially blocked, by the heavy cart traffic now carried on.

If the suggestions submitted in the memorial to his Honor the Lieutenant-Governor receive prompt and favorable attention, it follows, as a matter of course, that the rules intended for importation and transportation of petroleum can be greatly modified, and the working of the same be so much more simply and safely attended to, that we deem it needless to go into details of the present rules submitted.

(*c*)—There remains the question of "possession" of petroleum, which, if the above plan is carried into effect, will narrow itself to the retail trade of petty dealers in and near Calcutta; and rules for them should be more properly framed by the Municipal or Police authorities.

However, we are equally interested in seeing that these petty traders are protected from unnecessary official restrictions and interference, because upon the activity of these small dealers depends in a great measure the distribution of a cheap article for domestic use amongst the masses of the population.

We apprehend the object of the Petroleum Act was to protect life and property; and carrying this object into effect, rules and regulations were framed which necessitate license fees to compensate the Government for the expense of supervising the trade. The trade fully recognizes the necessity of paying in some form for the accommodation asked for, and for the supervision exercised by Government officials, but it is at the same time anxious to see it simplified under the suggested arrangement, instead of having hindrances multiplied under the proposed rules.

We are fully aware that the arrangements asked for from Government cannot be immediately executed, and that it requires estimates of cost to be worked out before the charges which the article is to bear can be clearly fixed and established; but as it is quite evident that some prompt measures must be taken to meet the increasing wants of this trade, it can only be for a limited period that the matter must necessarily remain in suspense; and for this limited period we think the Chamber might solicit Government to leave the question of these rules in abeyance, pending a more complete settlement of the whole question.

We understand the Committee of the Chamber has received a letter from Mr. Libby, who represents large

interests in the Petroleum trade in the United States, of which we have been favored with a copy. We think the suggestions contained in Mr. Libby's letter of great practical value, and have no doubt your Committee will, with their letter, forward a copy of his also to the Government of Bengal.

With out repeating *in extenso* many of the points touched upon in this interesting communication, we will only allude to the recapitulations which Mr. Libby thinks should be urged upon the attention of Government :—

1. Government godowns at a Depôt as near Calcutta as possible.

This has been strongly urged already in the memorial submitted.

2. Modifications to avoid needless loss to the importer in the event of *rejections.*

We think a separate part of such a depôt, under proper supervision, would meet the case; the owner and master of a vessel should not be mulcted by having his cargo kept on board on arrival at or near Calcutta, because in most cases he is not interested in its quality but is simply a carrier for hire. There should be a separate place for landing and storing the same, in case the oil is not up to Government tests.

3. "Copy of Bill Lading and New York Certificate to be delivered by masters of vessels in full of all Government requirements," to which we beg leave to add " for permitting landing and storing of the cargo."

The trade is agreed that there can be no difficulty in instructing the master who holds *copies* of Bill of Lading, as a rule, to attach to them copies of the certificates of the oil shipped; but we do not understand why the *form* should vary from the usual certificate granted in New York as suggested by the Government of Bengal; on the contrary, we think, the former quite adequate to afford the necessary preliminary protection under the Indian laws; whilst the form specified in appendix to the Government rules might, under certain circumstances as pointed out in Mr. Libby's letter, cause serious drawbacks and inconvenience in dealing with cargoes, directed "Galle for Orders," and for which the ordinary American Certificate may be on board with the master.

4. "A small testing fee in lieu of licenses."

We should recommend a small testing fee to cover '*Government Depôt charge*;' in addition to which there would of course be a *charge for storage*, depending upon the time that cargoes remain undelivered. These latter the importers or consignees of cargo would have to pay, and would constitute a primary charge upon the goods, whilst the expenses of the jetties would have to be met from charges upon the vessels that have the facilities of using them and the advantages of quicker discharge.

To the foregoing four items recommended by Mr. Libby, we would add—

5. A license fee for importing petroleum into the town and suburbs of Calcutta under Municipal rules separate from the testing fee as above.

Special rules under Municipal or Police regulation as regards the keeping or storage of smaller quantities of petroleum in the town and suburbs of Calcutta for the purpose of trade, which rules might likewise serve for any other localities or trading places under the Bengal Government.

The "testing fee" once levied should entitle the owner or consignee of the oil to a Government certificate, which should cover the transportation from depôt of the whole quantity, by either boat, train or waggon load and the removal of any portion should be accompanied by a certified copy of such certificate. For a trifling charge certified copies of the certificates should be granted by the Depot authorities for any portion that leaves the depôt, and for which the original certificate was granted; the number of such certificate to be branded on each case for identification.

In conclusion, we have only to refer to the letter from the Port Officer to the Government of Bengal, recommending Diamond Harbour as an anchoring place instead of Budge-Budge.

This we consider a needless delay; if once the Depôt is decided upon at Meteabrooz, and the erection of jetties, for which that part of the river offers special facilities, is carried out, it would in our opinion be unjust to delay a vessel at Diamond Harbour, as the discharge at the depôt will be quick, and there is no material danger in letting the vessels come up at once to its destination, which should be deemed as situated within the limits of the port of Calcutta.

Recommending the suggestion to the favorable consideration of your Committee,

We are, Dear Sir,
Yours faithfully,
(Signed) SCHRODER SMIDT & Co.
HOBSON, CONOR & Co.
ERNSTHAUSEN & OESTERLEY.
BALMER, LAWRIE & Co.
KETTLEWELL, BULLEN & Co.
RAMJEE DASS, LUCHMON DASS.
GONESH DOSS JAIRAM.
BISSENDYAL HURDYAL.

Calcutta, 18th September 1882.

To THE SECRETARY OF THE BENGAL CHAMBER OF COMMERCE.

DEAR SIR,

Having read, as suggested, the letter of 18th ultimo, from the Bengal Government to the Bengal Chamber of Commerce, I now respectfully submit the following comments :

As approximate unanimity is essential to give effectiveness to suggestions tendered by a commercial community to a Government, it is greatly to be desired that conflicting opinions may be harmonized on the several most important features of the "Rules" proposed by the Bengal Government for the "importation, possession, and transport of Petroleum." These I take to be—

1*st*.—The capacity, construction, and locality of godowns.

2nd.—The sampling of cargoes and the disposition of "rejections."

3rd.—The documents to be delivered up by the master of a vessel to the local authorities,

4th.—The manner (by licensing or otherwise) in which the petroleum business shall pay its contribution to the revenue.

Godowns, &c.—In the judgment of those who have given the subject the closest attention, the consumption of petroleum in India, notwithstanding the rapid increase of the past few years, is still in its "infancy;" and further accommodation in Calcutta will be necessary in the near future. I think the Chamber should urge upon Government the prompt erection of godowns suitable for *at least* 500,000 cases, which could not fail to return a fair equivalent for the expenditure. A roof attracting as little heat as possible, a hard substantial flooring and *good ventilation* are the essential requisites of a good godown. Respecting the recommendation of the "Port Officer" *in re* "Diamond Harbour," it seems to me that, aside from any other question, the *distance* presents insuperable objections, complicating every detail of receiving and distributing, and imposing a transportation "tax"; increasing both cost and handling without bringing benefit to any one but the carrier. Any policy that lessens the handling of Petroleum, and brings its discharge and distribution under the easy supervision of the parties in interest, is greatly to be desired.

Sampling of cargoes and disposition of rejections.

I think the proposed rules should specify a time limit in which the primal test should be reported to the con-

signee, say, "as soon as possible, but not to exceed hours."

I refer to the four cargoes of rejected oil concerning the quality of which so great a divergence of opinion has arisen, to point out the unnecessarily severe loss to the importers arising from the disposition of the "rejections." Every one conversant with the petroleum business of the world is aware, that *assuming* the cargoes aforesaid to be without the requirements of the Indian Act of 1881, they were unquestionably of a quality such as had been for years consumed in India, and would to-day be accepted by ¾ths of the world including every tropical country except India. I construe the Indian Act of 1881 to contemplate the non-consumption and non-distribution of an oil of lower than 73° Abel test, but I fail to see how anyone can contend that the public safety is imperilled by the temporary *warehousing* of cases which the chemical examiner have reported as a few degrees only below the Indian requirement. I think the term "dangerous" in the Act a misnomer, and while used, I assume merely in an explanatory or technical sense, it seems that a word less harsh might be employed to designate the dividing line which the Indian Government have drawn to distinguish legal from illegal petroleum. An importer of good standing, and acting presumably in good faith, incurs a sufficiently severe penalty in submitting to the expenses incidental to extra handling, godown charges, re-shipment, extra freights, etc., without being compelled to expose his property to heavy deterioration as at present at "Garden Reach." I would therefore suggest that in future, should a "layer" of a cargo be reported by the chemical examiners

as below "test," that subsequent inspections should be for each 1,000 or 2,000 cases (instead of 5,000) until satisfactory oil is reached ; then, that the quantity apparently below test should be put in either a separate godown or in specified portions of *any* godown, until its fate is ultimately decreed, thus allowing it to be properly cared for and insured, and, if necessary, re-shipped. I do not apprehend that any oil of even a semi-doubtful character is likely to find its way to India hereafter.

Master of Vessel's documents.—I fail to see why a copy of the Bill Lading, together with a duplicate of the New York inspection certificate, should not *permanently* satisfy Governmental requirement. There is no "certified State analyst" for the purpose, and if there were, the signing of the proposed certificate would be clearly beyond his functions.

When I state that the world's consumption of petroleum in 1881 was upwards of 600,000,000 of gallons ($\frac{1}{60}$th of which only was for Indian consumption), it is evident that the inspection of petroleum in America is an important business of itself, and has naturally commanded the attention of the New York Produce Exchange, the largest and most influential commercial organization in the United States, resulting in the appointment and licensing of inspectors who have proved themselves duly qualified to the satisfaction of a Petroleum Committee composed of refiners, merchants, brokers and shippers, representing the various interests in the business. These licenses are revoked "for cause." There is no authority in America to outrank these inspectors' certificates, and if not regarded as conclusive by the Indian Government,

they should be received as strong presumptive evidence. It is not competent for the refiners to sign the suggested "declaration," as they very rarely know even the names of the foreign consignee, and sometimes not even the port of destination, as when, for example, a vessel clears "for Galle for orders." The refiner might sign a declaration that he had *shipped* the oil *inspected* under a certain contract, but it would appear to me to be most unusual and extraordinary to make such a demand. Nor can I regard the statement of the master of a vessel respecting the "test" of the petroleum he carries as very pertinent. When we remember the cargoes of petroleum that are floating to-day on almost every navigable water, there is little doubt as to the testimony forthcoming from masters of vessels as to its generally safe characteristics, and such belief is certainly having the practical endorsement of underwriters.

I might say, in parenthesis, that I think the rule specifying "covered cargo boats" for discharging might be amended by omitting the word "covered," leaving it optional with the consignee, who would doubtless find each preferable at times.

Licenses, &c.—Whatever may be said of the godown licenses, the transport licenses must result in endless delays and irritations.

It seems to me that petroleum may easily pay the *equivalent* which the licenses contemplate in a simple form. Why not a small testing fee per case? The detail of assessment and collection would be most simple; the consignee could readily estimate it in his first selling

contract, and the consumer (who in either case would be the real contributor) would find the increase of cost so slight as to be scarcely perceptible.

Recapitulating, I should urge upon Government—

1*st*.—Governmental godowns as near Calcutta as possible.

2*nd*.—Modifications to avoid *needless* loss to the importer in the event of rejections.

3*rd*.—Copy bill lading and New York inspection certificate to be delivered by masters of vessels in full of all Governmental requirements.

4*th*.—A small testing fee in lieu of licenses.

I do not regard it as within the scope of the present communication to discuss the two most *prominent* questions affecting the future of petroleum interests in India:—1*st*, the correct applicability of the Abel test and apparent variations claimed to be traceable to barometric and thermometric causes. This subject is having the careful consideration of the Chemical advisers of the Government, whose investigations are not likely to be completed for sometime to come, and the petroleum trade of the world may naturally anticipate much valuable information from the tests and experiments of Professor Redwood, who both from a scientific and practical standpoint, has probably had more experience with the Abel instrument and test than any man living.

The second question which I omit at this time to discuss is the very recent and emphatic official recommendation of Professor Abel, that the Indian standard of test

shall be increased to 83°. It is greatly to be hoped that the Government will not favorably entertain a recommendation calculated to so seriously embarrass the future of the business. In advance of any formal intimation from the Government, that they contemplate acting on Professor Abel's suggestions, it may be somewhat premature to agitate this question, but upon my return to Calcutta, later in the season, I will be pleased, if the Chamber of Commerce so desire, to present my views *in extenso* in the premises.

I have the honor to remain,
Very respectfully yours
WM. H. LIBBY.
(*Of New York City*)
In behalf of Corporations and Firms representing
about ninety per cent. of Petroleum exportation
from the United States.

From Chamber to Government of Bengal.

Calcutta, 24th January 1883.

The Committee of the Chamber of Commerce desire me to forward for submission to His Honor the Lieutenant-Governor the accompanying letter from Messrs. Ralli Brothers and other importers of Petroleum, together with a printed copy of a communication addressed by Mr. W. H. Libby to His Excellency the Viceroy and Governor-General, and Messrs. Schroder, Smidt & Co.'s dissent from the first proposition in the former representation.

In forwarding these papers for the consideration of the Honorable the Lieutenant-Governor, the Committee

direct me to say that the condition of Petroleum at time of landing in India is, in their judgment, the principal point to be kept in view; and that it is for the Government to determine whether certificates granted in America under regulations such as Mr. Libby proposes, will meet the requirements of the case.

To The Secretary to the Bengal Chamber of Commerce, Calcutta.

SIR,

The undersigned largely interested in the commerce of Petroleum have examined copies of the communication of December 21st, 1882, from W. H. Libby of New York city to His Excellency the Viceroy and Governor-General, and believe the suggestions therein contained should receive the favorable consideration of Government, and the Chamber of Commerce in the interests of all concerned should urge upon Government their prompt adoption, *viz* :—

(*a*) The finality of New York inspection under the conditions "T" have suggested, or other conditions satisfactory to the Indian Government.

(*b*) No alteration in the present standard unless (or until) pending scientific investigation proves *conclusively* a change in the character of the oil in transit equivalent to——degrees, when notice of one year should be given as to any amendment deemed necessary to accord therewith.

The undersigned are convinced that any advance in the present standard, *viz.*, 73° is not only unnecessary in

the public interests, but would seriously complicate the future of the business.

They also believe that conclusive determination of scientific questions at issue may not be attainable for a long time to come, and that the finality of American inspection certificates under conditions satisfactory to Government should be accepted in the interim, and perhaps permanently.

We hand you a copy of the communication referred to which should be considered in connection with the foregoing.

We have the honor to remain,
Yours respectfully,
pp. RALLI BROTHERS,
pp. RALLI.
ERNSTHAUSEN & OESTERLEY.

pp. SCHRODER, SMITH & Co. A. SMIDT (*applicable to section* (b.) *only*)
KETTLEWELL, BULLEN & Co.
HOBSON, CONOR & Co.

From Schroder, Smidt & Co., to Chamber.

Calcutta, 17th January 1883.

With reference to a letter which was addressed to you by a number of firms interested in the Petroleum trade on the subject of Mr. W. H. Libby's communication of 21st December 1882, to His Excellency the Viceroy and Governor-General, we now take the liberty of stating our reasons for signing the said letter with the remark

"applicable to section *b*, only." We trust that the Committee of the Chamber of Commerce in forwarding to Government the above mentioned recommendations of Mr. Libby, and the majority of merchants interested in the Calcutta Petroleum trade, will think fit—by annexing these lines—to record our objection to section *a* of Mr. Libby's recommendations.

Mr. Libby's pamphlet purports two questions of importance which demand early legislative determination, *viz* :—

(*a*) What character of Petroleum inspection shall be accepted as conclusive, which will alike satisfy Governmental requirement and relieve commerce from unnecessary risk and restriction in future ?

(*b*) Is any alteration in the present standard of test, *viz.*, 73° by the Abel instrument, necessary or desirable ?

The answer to these questions are :

(*a*) "The finality of New York inspection under the "conditions I have suggested, or other conditions satisfactory to the Indian Government.

(*b*) "No alteration in the present standard unless "(or until) pending scientific investigation proves con- "clusively a change in the character of the oil in transit "equivalent to——degrees, when notice of one year should "be given as to any amendment deemed necessary to record "therewith.

We have had no hesitation in seconding section *b*, because we think with Mr. Libby that the history of the Petroleum trade in India proves that an oil flashing at 73° Abel

will satisfy all reasonable demands, *i. e.*, that with some precaution it may be handled with perfect safety even in our tropical climate. We do not see the necessity or advisibility of restricting the import of an article which as a matter of fact is infinitely less dangerous than Jute, for instance, a commodity which in spite of its combustible nature and the damage it has done of late in Calcutta is allowed more freedom than Kerosine oil enjoys under the present Act.

To raise the standard from 73° to 83° might in our opinion be judicious if "the finality of the New York inspection" was adopted, but we believe it is unnecessary as long as the present mode of testing is maintained, provided that penalties for the importation of low test Petroleum are rigorously enforced, which, so far, has not been the case. It is a fact that the oil imported since the publication of Act 1881 was with few exceptions of a higher quality than the law required, for the simple reason that importers generally preferred to be on the safe side by importing oil of a good quality to the loss which might be caused by an importation of low test oil. The Petroleum which our firm imported for the last 15 months was found to flash as follows :—

"Royal Edward"	... 28/10	81	79°
"Cicero"	... 6/3	82	78°
"James Watt"	... 3/4	82	78°
"Memnon"	... 18/10	82	81°
"Savoir Faire"	... 19/7	82	80°
"Pharos"	... 30/12	82	84°

and we know that most other firms have been importing oil of a similar quality, although the law only prescribes

a test of 73°. This clearly shows that the fear of the existing law tended to improve the quality of oil imported an advantage which should induce Government to reject suggestion (*a*) "the finality of New York inspection," and to accede to suggestion (*b*) "no alteration in the present standard." Mr. Libby's able explanation that a raised standard would be tantamount to a considerably increased cost of the oil, and consequently, to a reduction in its consumption, will no doubt receive the due consideration of Government. We refrain from offering any remarks on this point, of which, we suppose, Mr. Libby is the only person in Calcutta able to judge.

It now remains to be shown why, apart from the above mentioned reasons section (*a*) of Mr. Libby's recommendations should in our opinion be rejected.

The experience gained from the four cargoes of the "Viscount," "Rossdhu," "Tintern Abbey" and "Celtic Monarch" has not been sufficiently sifted yet, to admit of being used *in exetnso* as an argument against American certificates. It is, however evident, that the investigations of the Chemical authorities can result in one of the following three verdicts only:—

1. That the quality of oil tested in America was not the same as the quality of oil shipped in the above four vessels, a mistake which is not beyond possibility, since the test was made in the warehouse and not on board, or

2. That the certificates granted in America were not reliable, or

3. That the oil shipped underwent a change, *i. e.*, deteriorated contrary to former experience.

A fourth verdict, *viz.*, that the mode of testing in India was wrong appears to us to be out of the question, as the results of the tests made by Prof. Pedler, Dr. Warden, and Mr. Waldie were more or less corroborated by Mr. Redwood.

Either of these verdicts would render it most desirable to abide by the present mode of testing, *viz.*, a test in India. The public safety demands, and the Act of 1881 prescribes in the interest of the public, that the imported oil should satisfy a test of 73° F. on Abel's instrument in India, a measure which justly excludes from the consumption in this country any oil which, by undergoing a change in transit or by any other reason, shows its dangerous nature when tested here, whilst it appeared to be fully up to Government standard in America.

We have no interest in disparaging the test certificates of the New York inspectors nor have we a desire to cast a slur on their sincerity, still we cannot help thinking that Mr. Libby's assertion "the reliability of the "American certificates had been vindicated with the "rarest possible exception, by passing unchallanged in all import markets of the world" cannot be accepted unreservedly. We wish to quote another authority whose opinion may be of some value. The Petroleum Act for the German Empire came in force on the 1st of this month, and the instrument used in testing the oil is, with some improvements, the same which has been adopted for England as well as for India, *viz*,, "Abel's" test apparatus. Up to the end of last year Petroleum was bought and sold in Germany on American certificates, but since the 1st of January 1883, the Petroleum Exchange of

Bremen (the largest European market for Petroleum has thought it advisable to follow the example of the London Petroleum Association whose certificates supersede those of the American inspectors. In a circular before us the members of the Bremen Petroleum Exchange criticize the American inspection certificates as "not always reliable," and we may add that anyhow, before the publication of Petroleum Act 1881, we often experienced the same. It would no doubt simplify the importation of Petroleum considerably if American certificates were accepted, but would not this measure render the Petroleum Act 1881 virtually unnecessary? The experience of the last 12 months has shown that for some reason or other, oil which does not satisfy the Government standard in India may be shipped under an American certificate characterizing the said oil as much, as might, under ordinary circumstances, be considered safe for India; and, we are of opinion, that unless this singular fact has been satisfactorily explained, an alteration of the existing test rules would not only render the Petroleum Act 1881 a dead-letter, but would moreover increase the uncertainty under which the Petroleum trade has been labouring in India ever since the suggestion of admitting American certificates was made. It was argued that unless the latter were to form a basis for all imports of Kerosine oil, the risk of importers would be so great as to deter them from touching the article in future. We must reject this argument as untenable. Our firm is not the only one which has always been able to obtain a quality of oil which was sure to satisfy the Indian test, and if others were less fortunate, their misfortune may in all probability be traced to some mistake or carelessness on

the part of the shippers. We have no doubt that American refiners or exporters are in a position to avoid such mistakes, that they will be more careful in future if Government affirms that the stipulations of the Petroleum Act 1881 will be strictly carried out, and that they will undertake to guarantee the quality of their shipments if importers insist on a clause to that effect being inserted in their contracts.

This we believe to be the only reliable basis for the Petroleum trade in India. It would prevent that this country should be made an outlet for badly refined oils, and we think it is in the interest of Government as well as of importers to make sure that our supplies of Petroleum should not only be cheap but of a safe and reliable quality.

No body will deny that the importers of the so-called condemned cargoes had to suffer severely for importing an oil which did not come up to Government standard, and we are the last to wish for a recurrence of similar cases. If we recommend, nevertheless, that the law should be strictly enforced, we do so because we believe that the hardships in the above cases are to some extent attributable to the unnecessary delay caused by the undecided action of Government. What we have already recommended in former letters to the Chamber is a penalty for the importation of low test oil. Such penalty need not be unnecessarily severe, but at the same time it ought to be heavy enough to prevent a wilful importation of dangerous Petroleum. We do not wish to advocate compulsory re-shipment, but a fine which would force it upon all importers to avoid contracting for their cargoes

at hap-hazard and without leaving a fair margin for any discrepancies which may arise from causes yet unknown. We are confident that this can be done without inflicting any hardship on importers, and we feel assured that a declaration on the part of Government that a penalty for the importation of oil flashing in India below 73° Abel would henceforth be strictly enforced, is the only measure required to relieve the Petroleum trade from all doubts and uncertainties.

We remain,
DEAR SIR,
Yours faithfully,
pp. SCHRODER, SMIDT & Co.

To
HIS EXCELLENCY THE VICEROY AND GOVERNOR-GENERAL.
MY LORD,

I avail myself of your Excellency's courtesy to respectfully submit a few facts and suggestions on behalf of the Petroleum industry of America relative to a commodity which from time to time has been the subject of Governmental consideration. I shall not attempt to discuss all the phases of this subject that have appeared on the Indian surface during the past few years; this would be to encroach unduly upon your Excellency's indulgence. Competent chemical examiners in Calcutta, Bombay and London are conducting a series of experiments to which special reference at this time would be premature. Therefore, I do not propose in this communication to cross the scientific frontier. Nor do I pro-

pose to refer to local issues or private interests, but confine myself to the consideration of the two questions of practical importance which are apparently the *only* ones demanding early legislative determination, *viz:*—

(a) What character of Petroleum inspection shall be accepted as *conclusive*, which will alike satisfy Governmental requirement and relieve commerce from unnecessary risk and restriction in future.

(b) Is any alteration in the present standard of test, *viz.*, 73° by the Abel Instrument, necessary or desirable?

Aside from local regulations, the permanent adoption of a safe standard, and the certainty of receiving it, absorb all other questions, whether practical or scientific. The statistics of 1881 indicate the world's consumption of petroleum to have been about six hundred millions (600,000,000) of gallons, also that exclusive of an infinity of minor shipments nearly twenty-four hundred (2,400) full cargoes were exported in that year from the United States, the greater part of which was manufactured in populous localities and loaded and shipped in New York harbour or immediate vicinity. A recognised standard of quality, together with an inspection which should be equitable and final, became long since a natural necessity to commerce and communities. The inspection of Petroleum in New York has become an important business of itself, demanding the undivided attention of a number of practical and scientific experts. These must be members of the New York Produce Exchange, must prove their qulifications before a committee of competency representing the various interests involved in their appointment, said committee having authority to issue a special license and revoke the same should any subsequent negligence or collusion

be proven. The foregoing is in accord with the legal powers of the Exchange, which are of legislative derivation. Cargoes of Petroleum can carry no higher form of *American* credential than the certificates of these inspector, and their reliability has been vindicated, with the rarest possible exception, by passing unchallenged in all the import markets of the world. Acceptance of the finality of these certificates is a safe and simple solution of this phase of the question. A verified duplicate of such certificate could be furnished the master of each vessel, the presentation of which to the local authorities on arrival should be accepted as in full of Governmental requirement; or such certificate might be filed with the proper Department prior to the arrival of the vessel. The American Refiner (manufacturer) would certify that the Petroleum inspected under a specified contract, was delivered to a specified vessel.

The objection which the Indian Government would naturally interpose is, that it has no present knowledge of these inspectors; no voice in their appointment; no control over their action. This might be obviated through the selection of one or more from their number after their reputation and capability had been ascertained through the medium of Her Majesty's Minister at Washington or the British Consul General at New York, or through the medium of the United States Department of State.—*Or*, Government might delegate to permanent residents in America a Chemical Examiner in whom it reposed confidence, who should verify the inspection of Indian cargoes, the incidental expenditure being reimbursed by a small "testing fee" at the port of entry. The magni

tude of the business would render this fee an almost nominal burden on the import interest. The recommendation that in some form, or under some conditions satisfactory to Government, the American certificate shall be accepted as a finality, is made wholly in the interests of commerce and is, in no sense of the word, the slightest imputation on the capacity, intelligence or good faith of the present Indian Examiners. Experience has evidenced, however, that the Able test is extremely delicate in its detail, and a very slight variation either in the instruments employed or in the application of the test, may produce a discordant or erroneous result, which without subserving any public interest might impose great injustice on the importer. If an occasional rejection is inevitable, is it not wiser and more equitable to all concerned that a heavy loss should be *avoided* at the port of *shipment* rather than *incurred* at the port of *entry ?*

The American refining interest, for whom I am authorized to speak, are disposed to co-operate, not grudgingly but cordially, in giving effect to any practicable inspection stipulation required by the Indian authorities.

Should Government regard the foregoing suggestions as inconsistent with its general policy or the public welfare, I think the probabilities of future embarrassments might be materially lessened by augmenting the number of present examiners by some expert from London, not necessarily of greater general competency, but whose long familiarity with the operation of the English Act (identic with the Indian) and long experience of the instrument and test, would render him a valuable auxiliary to the existing incumbents. The Petroleum Association of London

could doubtless designate several such from whom satisfactory choice could be made.

The question of making any alteration in the present standard has been revived through the recommendation of the eminent scientist whose name is indentified with the instrument and test adopted in Great Britain and India, *viz.*, that 83° should be substituted for 73°. An examination of Professor Abel's recommendation indicates that it was made without adequate information as to what inspired the existing Indian Petroleum Act, or the injurious effect upon commerce that would attend the adoption of his suggestion, and it is specially observable that he omits to claim that the operation of the existing Act has shown the standard of 73° incompatible with the public welfare, for has not experience demonstrated the contrary? History is more reliable than prophecy, and a practical fact than a scientific theory. Professor Able appears to claim, not so much that there is any necessity for advancing the present standard, as that no special reasons exist why it should *not* be advanced. This may be true from the standpoint of the laboratory, but it is certainly *not* so from the standpoint of commerce. In lieu of answering the arguments *against* a higher standard than 73,° Professor Able refers to the report of Professor Pedler to the Bengal Government prior to the passing of the present Act, as dealing conclusively with that branch of the question. It would appear, therefore, that the Government are invited to a reconsideration of the forebodings of Professor Pedler rather than to any new arguments on the part of Professor Abel.

Again, Professor Able intimates that the primal argument inspiring the adoption of 73° was, that it had been

adopted by the Home Government. He is surely in error in this intimation, for the primal argument was *not* that 73° had been accepted by Great Britain, but that a standard considerably *lower* than 73° had been for years accepted by every *tropical* country on earth—and it has been generally recognized in Great Britain that the adoption of so high a standard as 73° has left a very considerable margin between the danger and safety limit, and its (supposed) equivalent. *viz.*, 100° by a former Act was partly a concession to the Shale interests. Professor Able further intimates that the adoption of 83° cannot impede commerce, citing by way of proof that the barrack service obtain a still higher standard and at "very moderate rates;" but he *omits* to state that the possible *production* of products of that character is extremely small and totally inadequate to respond to anything beyond a *special* demand; and it is surely unnecessary to say that what might be an economic valuation to the purchasing agent of a great Government, might prove a forbidden luxury to the pauper millions of the Orient. But the leading motive which probably underlies Professor Abel's recommendation, is the belief that in using his instrument and test, the *higher* the standard the more indentic may be the result attained by inspectors in different localities and under varying climate influences. *Assuming* this to be the case, where would be the limit of the advance in standard? Is it not far more reasonable to exact that the instrument and test shall be harmonized to the requirements of commerce, and *not* that commerce shall be undermined to meet the imperfections of the instrument and test? As, however, progress is reported in the direction of securing equally concordant results regardless of

standard through variation of existing schedule regulations, it may be hoped that this phase of the question will disappear at an early day. I do not claim that the production of an oil of 83° would be a refining *impossibility*. To produce it in large quantities, however, would be attended with a materially higher cost, disturbing the regular operation of machinery and labor, restricting consumption, imposing an unnecessary burden on the consumer, and all this without improving the illuminating character of the product (rather the reverse), and yielding neither to individual nor community any equivalent for the added cost and inconvenience. For purposes of universal consumption, either 73° or 83° are safe illuminants. Both will *burn*, and both would alike succumb to gross carelessness or the cunning devices of the incendiary. We do not legislate against gas because suffocation occasionally attends its misuse. A match is safer minus the brimestone, only it then ceases to be a match. Immaturity burns not its fingers against a *cold* stove, but a stove without fuel has mistaken its mission. It cannot be denied that a fire-proof Petroleum would be safer than the present standard, but it would be no longer an article of commerce. Against exceptional carelessness in the use of many modern necessities, legislation must be ever powerless. Amid conflicting opinions and contradictory experiments, it is satisfactory to record a few statements that are facts, or almost universally conceded so to be.

1*st*.—No oil of a *lower* fire test than 110° is recognized as *being* refined Petroleum in the United States, nor could such product be delivered on any contract even if no fire test nor flash point was specified. Therefore, the risk of

any country or community having *no* legislation, is limited to receiving 110° fire test.

2*nd*.—That while an exact scale of equivalents between fire test and flash point has not been arrived at, 110° fire test is not likely to prove 73° Abel. 115° would not be far from the dividing line, while 120° has always proved fully adequate to meet the requirements of 73° Abel.

3*rd*.—That regardless of inspection contrarieties and the question of a possible change in the flashing point of the oil in transit, a *higher* quality of product is being exported to India, than is supplied, or ever has been, to any other tropical country, although the Indian consumption is as yet (per capita) much less than in several of the said tropical countries.

4*th*.—That when subjected to the exposure incidental to the various avenues of retail distribution in India, the tendency of Petroleum is decidedly towards *improvement* and not *deterioration* of the flashing point.

5*th*.—That any change, actual, apparent or imaginary, that the oil may undergo, would not transform it from a safe to a dangerous product for purposes of warehousing, transportation or consumption. This is of course aside from the question whether it might be transformed from above to below the legal requirements of the Indian Government.

6*th*.—That refined Petroleum is not liable to spontaneous combustion. The question as to whether the oil really undergoes any change in transit is by far the most important subject of pending chemical decision. It is a question that has only arisen recently in India alone, and so conflicting are the opinions, and so contradictory appear the facts,

that the American industry while open to conviction, are not yet prepared to accept as conclusive a theory which is in opposition to past experience. The American inspectors will be found disposed to co-operate cordially with the examiners of Calcutta, Bombay and London in the final determination of this question. It appears very doubtful, however, if any decision can be reached for an indefinite time of a character so decisive and unanimous as to be accepted by Government as *conclusive*. By way of anticipation, the verdict must be either that the oil *is* subject to change during transit to India or that it is *not*. If the *latter*, the question naturally becomes obsolete. If the *former*, it is most unlikely that the *extent* of difference could be reduced to decimal accuracy, and therefore, for the purposes of practical commerce, an *approximation* of difference would have to be accepted. I should in that case recommend that if the average difference of a series of cargoes and samples should indicate, for example, two degrees lower flash in India than in New York, that the Government still accepting the finality of New York inspection should give a year's notice whether it would accept 73° (practically conceding two degrees from the present standard) or insist upon 75° by the New York inspection. The American interest are not yet prepared to concede—although later on they may be—that any differences that have eventuated between the two countries may not be traceable to methods of sampling or some discordance in the instruments or applicability of the test. By way of recapitulation, I have therefore most respectfully to commend to the courteous consideration of your Excellency—

(*a.*) The finality of New York inspection under the

conditions I have suggested, or other conditions satisfactory to the Indian Government.

(*b.*) No alteration in the present standard unless (or until) pending scientific investigation proves *conclusively* a change in the character of the oil in transit equivalent to——degrees, when notice of one year should be given as to any amendment deemed necessary to accord therewith.

The announcement of this policy by the Government to the several Chambers of Commerce would at once relieve this important and growing industry from the embargo of many doubts and uncertainties at present surrounding it. I think the advocates of the existing Act may fairly claim that what theory predicated experience has demonstrated, *viz.*, that it has proved adequate to the demands of the public safety. In this connection I beg to call your Excellency's attention to the following letter of Mr. Redwood, written in response to one of mine of even date, just prior to his leaving Bombay for London.

COPY.

Bombay, 2nd October 1882.

WM. H. LIBBY, ESQ., (of New York.)

DEAR SIR,

With reference to your letter of this date, I have to say that the experience I have gained, and the observations I have made in India, have materially strengthened the opinions which I previously held on the question of the standard of test. I have no hesitation in affirming that any increase in the present standard of test for

Petroleum imported into British India is not demanded in the interests of the public safety, and would unnecessarily embarrass the commercial future of the product.

Yours truly,
(Sd.) BOVERTON REDWOOD.

Mr. Redwood has been identified with the Abel instrument and test from their conception, and has probably had more experience concerning them than any man living, this experience having extended over a long period of time, and including experiments and observations not only England and India, but on the Continent and in America.

Let me remark in parenthesis that I consider the community has a greater interest in judiciously located, properly constructed, well ventilated godowns than in almost any other phase of the question as it stands to-day. In the ordinary daily consumption, distribution and transportation of Petroleum, there is little to be apprehended. Nor when stored in large quantities is it spontaneous combustion, explosion, or even easy ignition that is to be feared, but only the contingency of design, or some unusual or unnatural cause that would produce general conflagration. A very hot and prolonged fire, and one difficult to subdue, would then result in what Petroleum is made to *burn;* in that consists its world-wide value; but instances are not few but many, when the wooden case containing the tins has been consumed without igniting the oil. Many modern conflagrations have evidenced that iron and granite are not impervious to the fire-fiend, and more could hardly be expected of Petroleum.

The manufacturer who refines it, the inspector who daily bends over it, the underwtiter who insures it, the ship's master and crew who transport it, the merchant who handles it, the multitudes who consume it, have ceased to regard it with special apprehension. It is being distributed in every land, and is floating on every sea. It has supplied one of the great wants of the world, and specially of the Orient, where it has either become a substitute for previous darkness, or replaced very inferior and far more expensive products. It has specially proved a boon to the masses of the poor, for it has placed within the reach of the scantiest purse one of the primal necessaries of life.

After journeyings which have been somewhat extensive and covering nearly every country in the Orient, I may claim for Petroleum that it is something of a civilizer, as promoting among the poorest classes of these countries a host of evening occupations, industrial, educational and recreation not feasible prior to its introduction; and if it has brought a fair reward to the capital ventured in its development, it has also carried more cheap comfort into more poor homes than almost any discovery of modern times. Therefore, I contend, that it has fairly earned the *encouragement* and not the *frown* of legislation. And I feel assured that not only the American industry, but all interested in the commerce and consumption of Petroleum will join in the hope—may I not say the anticipation—that an inexpedient suggestion from a distant laboratory may encounter the more practical wisdom of your Excellency and your Honorable Council. Fearing that I have treated this subject with greater informality, and that I have traversed a somewhat wider latitude than is consistent in the previ-

leged communication from the citizen of one country to the head of the Government of another, I yet venture to hope that the important commercial interests, Indian British, American, that are involved, may constitute my apology and be accepted as my justification.

I have the honour to remain,

MY LORD,

Your Excellency's most obedient servant,

CALCUTTA; *December 21st*, 1882. } WM. H. LIBBY, *(of New York)*

From Government of Bengal to Chamber.

No. 1303 $\frac{T}{M}$, *Dated Darjeeling, the 30th Oct.* 1882.

I am directed to acknowledge the receipt of your letter, dated the 16th instant, * in which the attention of Government is invited to the Memorial recently submitted by certain Merchants, Agents, and Dealers interested in the Petroleum trade in Calcutta, containing suggestions for the protection and encouragement of the trade. The Committee of the Chamber fully concur in the proposals made by the Memorialists, and recommend them for the consideration of Government.

In reply, I am directed to state, for the information of the Committee of the Chamber of Commerce, that the suggestion made by the Memorialists that Screw Pile Jetties and Godowns should be erected at Meteabrooz for the landing and storage of Petroleum cargoes is

* *Printed in last Report.*

ready under consideration in the General (Marine) and Public Works Department of this Government. The Board of Revenue have also been asked to ascertain whether the land referred to by the Memorialists, as that on which the Godown should be erected, could be acquired on reasonable terms. The representations made by the Chamber and by the Memorialists will receive full consideration before the matter is finally decided by Government.

The Hon'ble AUGUSTUS RIVERS THOMPSON, C.S.I., C.I.E.

Lieutenant-Governor of Bengal.

The Humble Memorial of the undersigned

MERCHANTS, AGENTS, DEALERS, &c.

RESPECTFULLY SHEWETH,—

That your Memorialists are now and have for some time been interested in the Petroleum trade, or and in the shipping and general commerce of the Port of Calcutta.

That your Memorialists have for some time observed the Petroleum trade rapidly increasing and becoming an extensive article of import into India, and especially into this port, without any provision being made for its expansion here, without any appliances except mooring accommodation to encourage or foster it, and even without suitable accommodation for carrying it on with a due regard to the interest of the port or to public safety and convenience.

That your Honor's Memorialists have only to draw your attention to the four cargoes of Petroleum detained

for weeks on board the vessels carrying it, at the Meteabrooz Ghaut, and for months in open ground exposed to the rains and to the weather, in the heat of June and July, and up to the present time, to show the great necessity which has arisen for proper accommodation for this comparatively new and increasing trade, and which promises to expand very largely in a few years. On the reasons for that detention your Memorialists do not propose to enter.

That the importations of Petroleum into Calcutta were:—

	In 1881-82	1880-81	1879-80	1878-79.
Gallons	5,776,610	4,217,382	3,696,348	1,077,878.

or an increase in four years of nearly 536 per cent., that is, the trade has increased more than five-fold in that short period, and there is a further considerable increase in the current year.

That so great an expansion of the trade in this article proves clearly how very suitable refined Petroleum is for domestic uses all over the country, and, therefore, apart from any other considerations, how desirable it is to foster and assist it, and how urgently necessary it is to provide suitable accommodation for it. It is simply astounding that up to this time so large a trade has been left almost uncared for, and unassisted in any way whatever.

That your Memorialists have heard with great dismay and concern that not only are there measures proposed which are calculated to repress and damage this new trade by raising the test limit to 83° by Abel's instru-

ment, but that it is contemplated to remove the trade to Diamond Harbour from its present convenient and suitable locality.

Against any such repressive action your Honor's Memorialists most respectfully protest, and they approach your Honor to explain (1) what according to their experience and judgment, the Petroleum trade requires to provide for its prosecution within safe limits, and for its expansion in the future; and (2) what they consider the dangerous and repressive measures above referred to may culminate in, to the prejudice of this special business, and to the great loss and inconvenience of the masses of the people, the chief consumers of Petroleum.

First, as to suitable accommodation: Your Honor's Memorialists do not think a locality can be pointed out which is more suitable or more convenient, alike for Merchants, Agents and Commanders of ships, and also for Dealers in the article, than the Meteabrooz Ghaut. The fairway for navigating vessels is in no wise interfered with. There is sufficient space available for several large vessels to lie in safety. This locality is a convenient distance from Calcutta. Discharged ships can be conveniently supplied with ballast, and can easily drop up to their reloading berths. Your Memorialists see nothing wanted except that the land bounded by the roadway, the Meteabrooz Ghaut lane, the river Hooghly and the Khal,—the latter on the south of the said lane should be taken up for public purposes under the Land Acquisition Act. That at least six spacious and well ventilated and suitable Godowns should be erected thereon, either by the Public Works Department or by the Port Trust,

and that at least three Screw Pile Jetties should be erected connecting the Jetties to the Godowns by a tramrail to enable vessels to discharge their cargoes with despatch in all states of the tide, and in all weathers. To recoup the expenses incurred, a moderate rent of the Godowns, whilst occupied, should be charged to Importers, and Agents of vessels would no doubt gladly pay Jetty hire for the accommodation afforded to them. Vessels cannot now discharge a cargo of Petroleum of 50,000 cases under 25 to 30 days, but, with suitable Jetties, this quantity could easily be discharged during ordinary working hours in ten days at the outside. To facilitate the storage and removal of Petroleum, a suitable staff of officers for testing and supervising importations, as well as skilled labor would be necessary, the expense of such establishment to be paid for by importers. With these proposed measures in working order, the public convenience and safety would be amply provided for, and the complaints of utter want of accommodation for this oil trade, which your Memorialists hereby respectfully make, would be removed. It is hardly necessary for your Memorialists to point out how desirable it is to put an inflammable article like Petroleum ashore and into a place of safety as quickly as possible. This fact alone will commend the subject to your Honor's attention.

Your Honor's Memorialists see no practical or insuperable objections to the carrying out of the measures above suggested for the accommodation and protection of the Petroleum trade, the details of which, as also the size and form of Godowns, &c., can be easily arranged here-

after. It may be urged that private business, as the keeping of private Godowns, &c., would be disturbed and interfered with, but your Memorialists are credibly informed this would not be felt to any appreciable extent. It will be felt very much more if action is delayed.

Into the merits of the discussion as to the quality of particular cargoes which arrived in the current year, your Honor's Memorialists do not propose to enter, but your Memorialists feel, and respectfully desire to express their opinion, that the absence of any fixed or comprehensive regulations as to sampling, the want of any proper organization for testing, and the total want of a properly formed depôt for landing and storing Petroleum in this Port, have greatly aggravated the inconvenience and increased the loss suffered by those interested in the said cargoes.

Second, in regard to raising the test of Petroleum imported into Indian Ports to 83°F. by Abel's instrument your Honor's Memorialists hold a strong opinion that the limit of 73° is as safe as is reasonable for commercial oil, and in this opinion they agree with the Committee of the Supreme Council, the Bengal Chamber of Commerce, and with the Refining interest in the United States of America. A further reason is that to raise the limit of test would check the volume of the trade by increasing the cost of the oil, and that such a high class as 83°F. could not be obtained in quantity, nor would consumers derive any benefit from the proposed alteration as 83°F. is not safer than 73°F. The illuminating power of the latter is quite as good as that of the former;

besides, to increase the standard test could hardly fail to repress, if it did not practically exclude, Indian Petroleum from this market.

In regard to the proposed site at Diamond Harbour for the accommodation of the Petroleum trade, your Honor's Memorialists desire to say, that a more unsuitable locality in every respect, could hardly be proposed. We most respectfully protest against it, and for the following reasons, which your Honor's Memorialists trust will be considered sufficiently cogent to cause the proposal to be abandoned :—

1st.—There are no means whatever for landing and storing Petroleum or for repairing leaky cases, &c. There is no facility for removal to Calcutta.

2nd.—The distance of Diamond Harbour from Calcutta would render all supervision extremely difficult, if not impossible, and Petroleum requires skilled labor in course of landing which is not available at Diamond Harbour.

3rd.—Because ships arriving at Diamond Harbour would not be within the port, and could not be considered as having reached their destination, if their charters stated, as is usual, the port of Calcutta.

4th.—If ships were obliged to discharge their cargoes at Diamond Harbour, they would be exposed to great danger, inasmuch as they could not get ballast without great expense, to enable them to come up to Calcutta.

5th.—Fresh steam hire would have to be incurred, the Petroleum trade being done by large vessels.

6th.—Admitting that ballast could be obtained, it would probably have to be discharged again in Calcutta in many instances.

7th.—The cartage to Calcutta of Petroleum would be greatly increased, and also the cost and loss by leakage by such long land carriage.

8th.—There would be constant litigation as to the reading of charters if a site at Diamond Harbour is approved.

Your Honor's Memorialists are aware that it is contemplated to connect Diamond Harbour by a branch line with the Calcutta and South Eastern Railway, but your Memorialists are of opinion that such a connection would not afford any material abatement of the numerous objections above pointed out to Diamond Harbour as a site for this new trade.

Your Memorialists keep in view and do not lose sight of the probability, that when the new Central Railway Station has been erected in Calcutta, a branch line may be constructed from the bottom of Garden Reach to the Eastern Bengal Railway Station, but this subject is outside the consideration of the present memorial.

In conclusion, your Honor's Memorialists would respectfully point out, that to concentrate the trade of the port is more necessary at present than to extend it: that any measures tending towards repression are much to be deprecated, and especially is this so in regard to the

comparatively new trade in Petroleum between the United States of America and this Port.

And your Memorialists will ever pray.

pp. SCHRODER, SMIDTH & Co.
A. SMITH.
GLADSTONE, WYLLIE & Co.
PEEL, JACOB & Co.
FRANCIS BEER.
KER, DODS & Co.
BALMER, LAWRIE & Co.
KETTLEWELL, BULLEN & Co.
HOBSON, CONOR & Co.
ERNSTHAUSEN & OESTERLEY.
REINHOLD & Co.
BISSENDYAL HURDYAL.
NUNDOO COOMER PAUL & Co.
ISSEN CHUNDER DEY.
OMERTOLAL DHAW.
KISTO CHUNDER COONDOO.
KOYLAS CHUNDER PAUL.
RAMJEE DOSS, LUCHMON DOSS.

Calcutta, 25th September 1882.

BILL TO REGULATE THE MANUFACTURE, KEEPING, SALE, CONVEYANCE AND IMPORTATION OF EXPLOSIVES.

From Government of Bengal to Chamber.

No. 398 *J., Calcutta, the* 22*nd January* 1883.

I AM directed to forward the accompanying copy of a Bill to regulate the manufacture, keeping, sale, conveyance and importation of explosives, together with a copy of its annexed statement of Objects and Reasons, and to ask you to be so good as to move the Chamber of Commerce to favour the Lieutenant-Governor, on or before the 20th February next, with an expression of their opinion on the provisions of the Bill.

From Chamber to Government of Bengal.

Calcutta, 14*th February* 1883.

The Committee of the Chamber of Commerce direct me to acknowledge the receipt of your letter No. 398 J., of the 22nd of last month, with copy of Bill relative to the manufacture, keeping, sale, conveyance and importation of explosives.

The comprehensive statement of Objects and Reasons which accompanied the Bill appears to contain ample grounds for the legislation which it is proposed to adopt throughout British India, in respect of dynamite and other explosive substances, and the Committee of the Chamber concur in the expediency of a measure, the provisions of

which seem well adapted to guard the public safety against indiscriminate dealing with such dangerous articles.

The only point which the Committee deem it necessary to notice, is the requirement of the numerous licenses under the Bill in addition to those which are compulsory under the Indian Arms Act of 1878: and in regard to this it has been represented to the Chamber, that such licenses should be diminished as much as possible, so as not to hamper the trade unnecessarily or overburden it with a multiplicity of charges.

IMPORTATION OF EXPLOSIVES INTO INDIA.

From Govt. of Bengal to Chamber of Commerce.

No. 83 *J. Calcutta, the* 5*th January* 1883.

Referring to past correspondence on the subject of the importation of explosives into India, I am directed to forward herewith a copy of a letter from the Government of India in the Home Department No. 2061, dated the 31st December 1882, and of its enclosures, and to request that you will be so good as to move the Chamber of Commerce to favor the Lieutenant-Governor with an expression of their opinion generally on the suggestions made by Colonel Ford, Inspector of Explosives, in his Memorandum of the 12th October 1882.

I am to request the favor of a *very early* reply to this letter.

From Govt. of India to Govt. of Bengal.

No. 2061, *Fort William, the* 31*st December* 1882.

With reference to the correspondence ending with your letter No. 220, dated the 14th September 1882, on the subject of the importation of explosives into India, I am directed to forward a copy of the papers marginally noted, and to request that, with the permission of His Honor the Lieutenant-Governor, the question whether the heat test as applied in England is suitable to the circumstances of India may be referred, for an expression of opinion, to Mr. Pedler, Professor of Chemistry, Presidency College, Calcutta, and to Surgeon Warden, Professor of Chemistry, Calcutta Medical College. I am further to request that His Honor may be moved to favor the Government of India with any remarks which he may have to offer upon the suggestions made by Colonel Ford. It should be understood that it is only proposed to adopt those suggestions, if adopted at all, as a temporary measure, pending the passing into law of a Bill which will probably be shortly introduced into the Legislative Council, and will deal with the importation, &c., of explosives throughout British India.

Despatch from Her Majesty's Secretary of State, No. 172, dated 19th October 1882, and enclosures.
"Heat test as applied to dynamite and analogous nitro-glycerine preparations."
Extracts, pages 112 and 113 of the Report of the Special Committee on Gun Cotton, 1871 to 1874.
Form of application for a license to import explosives.

2. The favor of a very early reply is requested.

From Her Majesty's Secretary of State for India, to His Excellency the Most Honorable the Governor General of India in Council,—No. 172 *(Statistics & Commerce), dated India Office, London, the* 19*th October* 1882.

With reference to your telegram of 4th instant on the subject of the importation of explosives into India, and in continuation of my telegram marginally transcribed, I forward herewith, for Your Excellency's information, copy of a letter * from the Home Office, enclosing a memorandum, with full details, by the Inspector of Explosives. I concur in the recommendations made by Colonel Ford, and should advise their adoption unless there is some difficulty which does not now occur to me.

In reply to your telegram of 4th instant, Home Office suggest prohibition of explosives, both English and foreign, except on condition that samples are free from exudation, and pass Home Office heat test as by Majendie's printed Rules, dated 1st November 1881, and that consignments are carefully packed, and not landed till permission given on samples passing test. Despatch follows shewing all details and description of heat test.

* Dated 12th October.

From Godfrey Lushington, Esq., Assistant Under-Secretary of State, Home Office, to Her Majesty's Under-Secretary of State for India —No. A. 18155—6, *dated Whitehall, the* 12*th October* 1882.

I am directed by the Secretary of State to acknowledge the receipt of your letter of the 7th instant, transmitting copy of a telegram from the Government of India on the subject of the importation into that country of preparations of nitro-glycerine of foreign manufacture, which do not satisfy the requirements of the Explosives Act, 1875 ;

and in reply, I am to transmit, to be laid before the Secretary of State for India in Council, the enclosed copy of a memorandum * by Colonel Ford, Inspector of Explosives, together with the documents † mentioned therein.

* Memorandum dated 12th October 1882.

† Four documents.

Memorandum by Colonel A. Ford, Inspector of Explosives, dated the 12th October 1882.

The attention of the India Office should be drawn to the correspondence relative to a supposed shipment of dynamite per *Portinscale* in July last, and it should be pointed out that it is to the interest of Nobel's Explosives Company (who are the principal manufactures of nitro-glycerine preparations in Great Britain) that all foreign dynamite should be excluded from India. It is quite true that attempts have been made to import into England a considerable quantity of impure dynamite by one firm, *viz.*, Krebs Brothers (now the International Explosives Company) of Cologne ; and as prosecutions have ensued, the fact has come to the knowledge of Nobel's Explosives Company, who, it may be presumed, naturally make the most of it in order to push their own trade.

Any communication, therefore, from an Agent of Nobel's Explosive Company on the subject of "impure foreign dynamite" should be looked upon as coming from a trade rival.

Only two brands of foreign dynamite (both No. 1 dynamite) have been imported into England on a large scale—

one of "Opladen" manufacture, the other made by Krebs Brothers above referred to. The former has been found uniformly good; the latter has proved to be, almost without exception, bad.

The system of examination of imported dyna mite in force in England is as follows:—

When a consignment arrives, samples (one cartridge from each of six boxes) are taken by the Customs, and the samples are brought without delay (in guttapercha boxes or the purpose) to London, and handed over to the Chemical Referee of the Explosives Department.

As soon as the samples have been taken, the explosive may be landed by the importer.

The test to which the dynamite is subjected by the chemist in order to ascertain that the nitro-glycerine of which it is composed is thoroughly purified, is given in the enclosed "heat test.' It can be applied by any qualified chemist.

If the samples do not pass the heat test, steps are at once taken to ascertain where the consignment has been deposited, and it is placed under seizure by one of Her Majesty's Inspectors of Explosives, further samples being taken. These are also brought to London and subjected to the same test. As a rule, there is no difficulty in ascertaining where the bulk of the consignment has been deposited; as, before an importation license is granted, an applicant for such a license must state where he proposes to store the explosive on its arrival (see Form E. enclosed).

The apparatus and materials having been prepared (as described in the heat test) no great time is required to test the samples; as if the standard test is not produced in a quarter of an hour, the nitro-glycerine is considered thoroughly purified and the samples pass the test.

One or more samples are afterwards tested for the percentage of nitro-glycerine. Dynamite very rarely fails in this respect. Exudation (if any) is generally detected by Her Majesty's Inspector, who, on visiting magazines in different parts of the country, takes the opportunity of examining some of the dynamite at the same time. One of Krebs' cargoes which just passed the heat test on its arrival was subsequently condemned on this ground, and was re-shipped to Cologne for re-manufacture. Cases of exudation are also rare.

It will be seen, therefore, that the test which practically decides whether foreign dynamite shall be condemned or not, is the "heat test," which is easy of application, and when the samples are actually in the hands of the chemist, takes very little time.

The India Office ask as to the course to be adopted with respect to (*a*) shipments now afloat, and (*b*) future shipments.

As regards (*a*) it appears from the letter now under reply, that the Customs Act gives power to prohibit entirely the importation of dynamite into India. I presume, therefore, that it also gives the power of prohibition *conditionally*. If so, I would suggest that dynamite might be prohibited (English as well as foreign make) except on the

following conditions, *viz.* :—(1) that samples taken from the consignment are free from exudation, and pass the same "heat test" as applied in England; and (2) that the consignment is not landed until permission to that effect is obtained. This permission should only be given on the report of the chemist that the samples satisfy the requirements stated in (1). This course will, I think, meet every difficulty.

As regards (*b*) I see no reason why the course recommended under (*a*) should not be adopted with respect to future shipments. If the foreign dynamite is of good quality (and this can be ascertained by the tests), there is no need to prohibit its further importation into India.

As to the proposal to prohibit any explosive which has not satisfied the requirements of the English Act, I would point out that there would be a difficulty in granting a certificate to a manufacturer to that effect. If a manufacturer were permitted to consider that he could submit samples to be examined as a matter of right, the demands upon the time of the chemical adviser would be unlimited. Further, the certificate would only relate to certain samples, and it is quite conceivable that an exporter who wished to get rid of a lot of impure dynamite, could mix it with a consignment, samples from which had been reported upon favorably by the chemist.

Again all foreign dynamite to be exported to India would have to be imported into England to be tested. Such a system (if it could be adopted) would practically amount to a prohibition of foreign dynamite in favor of dynamite of English make.

If the Government of India should think fit to adopt the course I have suggested, *viz.*, the prohibition of the importation except on certain conditions, I would recommend that another condition in addition to (1) and (2) stated under (*a*) should be attached as follows:—(3) all dynamite improted shall be packed only as provided for the package of nitro-compound, division I, in the order of Secretary of State, No. 3 (copy enclosed), see part marked in red ink, which should be set out at full length.

From Chamber to Government of Bengal.

Calcutta, 10th January 1883.

I am directed by the Committee of the Chamber of Commerce to ackowledge the receipt of your letter No. 83J. of the 5th instant, with its enclosures, relative to the importation of explosives into India.

In reply to the reference made with regard to the suggestions by Colonel Ford, Inspector of Explosives in England, I am instructed to say that the Committee find considerable difficulty in answering the inquiry, beyond stating that the system of examination in force in England seems suitable to this country also, and that it should be made applicable to all dynamite which is imported whether it be of English or foreign make.

So far as the very limited knowledge of the subject which is available to the Committee can throw light on it, they see no objection to the suggestions made by Colonel Ford.

PROPOSED LEVY OF DUTY ON BRANDY OR CORDIALS IN BOTTLES CONTAINING PRESERVED FRUITS.

The proposal of the Collector of Customs having been placed before the Chamber by the Board of Revenue, the Committee submitted that sufficient grounds did not appear to exist for making any alteration in the present practice of admitting such spirits duty-free, unless the Collector had reason to believe that he was dealing with instances of exceptional excess intended to defraud the revenue.

From Board of Revenue to Chamber.

No. 104*B.*, *dated Calcutta the* 25*th Jany.* 1883.

I AM directed to forward herewith copy of letter No. 16, dated 10th instant, from the Collector of Customs, Calcutta, submitting for orders a question whether duty should be levied on the quantity of brandy or cordial contained in the bottles in which preserved fruits are imported; and to request that you will favor the Board of Revenue with the opinion of the Chamber of Commerce on the subject.

From Collector of Customs to Board of Revenue.

No. 16, *dated the* 10*th January* 1883.

I have the honor to draw the attention of the Board to the following point in connection with the importation of

fruits preserved in spirit or cordials, and to request that instructions may be issued as early as possible.

Before the abolition of the general import duties in March last, all importations of preserved fruits were charged with duty under provision No. 47 of the Tariff Schedule; but since that time, as this head was removed from the Tariff Schedule, they have been passed free of duty. These articles are generally preserved in brandy, cordials or syrup, and the point upon which I desire the Board's instructions is, whether I should levy duty on the quantity of brandy or cordial contained in the bottles when fruits are preserved in these liquors.

There have been several importations recently of fruits preserved in brandy which have been passed free of duty in accordance with the usual practice, but I am doubtful if this should be allowed to continue; the amount of spirit contained in one bottle has been found to be about four liquid ounces.

On referring to the "Imperial Tariff," I find the practice in England is to pass the fruit free of duty, whilst the spirit is taxed at the rate fixed for "unenumerated spirits," and though the importations of such articles into Calcutta are not large, I would submit for the consideration of the Board whether the same practice should not be followed here.

From Chamber to Board of Revenue.

Calcutta, 8th February 1883.

The Committee of the Chamber of Commerce direct me to acknowledge the receipt of your letter No. 104 B of the 25th of last month, forwarding copy of letter No. 16 of the 10th idem from the Collector of Customs, who submits for the Board's consideration whether the practice which prevails in England as to the levy of duty on spirits in which fruits are preserved should not be followed here.

In replying to the Board's invitation for an expression of opinion on the Collector's proposal, the Committee desire me to say that while they do not fail to recognise the principle on which such duty is maintained in England, as well as the magnitude of a trade yielding a large addition to the English revenue, they apprehend this the adoption of the Home practice by the Indian Customs and its application to an article of relatively small importation here would result in such trifling accession to the Customs Collectors as to scarcely justify a disturbance of the tariff arrangement under which fruits preserved in spirits are admitted free.

At the same time the Committee are quite prepared to allow that the Collector would be justified in levying the duty if the quantity of spirits were ascertained to be inordinately large, and if he had reasonable grounds for believing that he was dealing with instances of exceptional excess intended to defraud the revenue.

DUTY ON PERFUMED SPIRITS.

From Board of Revenue to Chamber,

No. 1341 *B. Dated Calcutta,* 15*th December* 1882.

EXCISE:

H. A. COCKERELL, ESQ., C. S. I.

I am directed to forward, for the information of the Chamber of Commerce, copy of the correspondence marginally cited, and to request that you will favor the Board with an expression of the opinion of the Chamber of Commerce on the proposals made by the Board in their letter No. 704 B., dated 23rd August last, *viz:* (1) to exempt from payment of duty perfumed spirits (Eau-de Cologne, &c.) containing more than a certain percentage of proof-spirit, leaving only the weaker and worse kinds to be assessed with duty without respect to the size of the bottles in which they are imported, and (2) to adopt, say, 55° over-proof as the limit of strength for the purpose proposed.

Govt. of Bengal No. 279$\frac{T}{P}$ dated 25th May 1882 and enclosure.
Board to Govt. No. 704 B. dated 23rd Augt. 1882 and annexure.
Govt. order No. 2245$\frac{T}{P}$ dated 22nd October 1882.

From Govt. of India to Govt. of Bengal.

No. 886, *Simla the 6th May* 1882.

In January 1881 the attention of the Government of India was drawn to the fact that in certain parts of the Bombay Presidency, Eau-de-Cologne imported in bottles containing not more than half a pint, and at that time

liable to duty on importation into India at 5 per cent. *ad-valorem* instead of at Rs. 4 a gallon, the rate charged on perfumed spirit in bottles containing more than half a pint, was used as a substitute for spirituous liquor to an extent which threatened to affect the excise revenue. The Eau-de-Cologne so called, was found in some instances to be 19·7 degrees overproof, and was able to compete successfully with both imported and country liquor, which had to pay a duty of Rs. 4 per gallon of proof. Local Governments and Administrations were accordingly requested to ascertain and report whether perfumed spirits, such as Eau-de-Cologne, Lavender water, &c., were similarly employed in their respective provinces as a substitute for spirituous liquor, and if so, to what extent, and whether there appeared to be any necessity to protect the revenue against the consequences of the practice.

The replies received from the several Local Governments and Administrations addressed, showed that the practice alluded to did exist to a greater or lesser extent in almost every Province. In order, therefore, to check the practice, provision was made under Section 2, Schedule II of the Indian Tariff Act XI of 1882, by which perfumed spirit imported in wood or in bottles containing more than 4 ounces became subject to duty at the same rate as that leviable on spirits, *viz.*, Rs. 4 per imperial gallon of the strength of London-proof.

The Governor-General in Council is of opinion that in addition to the increase of duty leviable under the Tariff Act, further restrictions should be placed on the sale of Eau-de-Cologne for consumption as a spirituous liquor, and that the restrictions should, if possible, be effected by means of the excise laws in each Province.

In carrying out the needful measures, it is to be borne in mind that no pressure should be put upon honest dealers who trade in the genuine article, the object being simply to check the sale of the perfumed spirit passing under the name of Eau-de-Cologne. It appears to the Governor-General in Council this end may be best attained by ruling that Eau-de-Cologne containing less than a certain percentage of proof-spirit may be sold duty-free by respectable tradesmen, but that if the article be found to contain spirit above that standard, it should be treated as imported liquor under the definition of the excise law, and be sold only under a license for the Sale of English liquor.

I am accordingly directed to request that His Honor the Lieut.-Governor take into early consideration the feasibility of placing restrictions of the nature indicated in the preceding paragraph, or other restrictions of a similar character, on the sale of Eau-de-Cologne and other perfumed spirits sold for use as intoxicating drinks, and favor the Government of India with a report on the subject.

No. 279T.

Copy forwarded to the Secretary to the Board of Revenue for the favor of an early report.

By order, &c.

(Sd.) E. N. BAKER,

Offg. Under-Secretary to the Govt. of Bengal.

FINANCIAL DEPT.
Excise, Darjeeling,
The 25th May 1882.

From A. FORBES, ESQ., *Secretary to the Board of Revenue, L. P., to the Secretary to the Government of Bengal, Financial Department,—No.* 704*B. Dated Calcutta the* 23*rd August* 1882.

EXCISE.

SIR,

I am directed to acknowledge the receipt of Government order No. 279T—F, dated 25th May last, giving cover to the orders of the Government of India, suggesting that, in order to prevent loss to the Government revenue from the growing practice among natives of using Eau-de-Cologne and other perfumed spirits as a substitute for spirituous liquor, restrictions should be placed on their sale for consumption as an intoxicant by means of the excise laws, and calling on the Board to report whether the end in view might not be best attained by ruling that perfumed spirits containing less than a certain percentage of proof-spirit may be sold duty-free by respectable tradesmen, but that if such articles be found to contain spirit above that standard, they should be treated as imported liquor under the definition of the excise law, and be sold only under a license for the sale of imported spirits.

H. A. COCKERELL, ESQ., C.S.I.

2. On receipt of the Government order the Board consulted the Commissioners of the Dacca, Burdwan, and Presidency Divisions in whose jurisdictions the principal cases of consumption of perfumed spirits as intoxicants had occurred, and they also requested the Collector of Customs and the Chemical Examiner to Government to report the usual precentage of proof-spirit contained in Eau-de-Cologne imported into this country.

3. A copy of the reply received from the Collector of Customs is enclosed for the information of Government.

The statement submitted by Mr. Grimley indicates that Eau-de-Cologne containing the highest precentage of proof-spirit is imported only by respectable European firms, and that the operations of native dealers are confined to perfumed spirits containing a comparatively low percentage of proof-spirit. Mr. Grimley's statistics have only been collected since the receipt of the Government orders under reply, but the conclusions now drawn from them are supported by subsequent enquiries which the Board have made from Messrs. Bathgate & Co. That firm, at the Board's request, have tested several samples of the Eau-de-Cologne imported by them, and find that the precentage of proof-spirit ranges from 50 to 54 O. P. In regard to the Eau-de-Cologne sold in the bazars Messrs. Bathgate & Co. state as follows:—

"The favourite brand with the box-wallahs is one which does not appear in any good wholesale-house list. We do not know the precentage of proof-spirit in this or the other cheap brands, but they most necessarily contain a very low precentage compared with the more expensive qualities."

The evidence adduced by the Collector of Customs is also corroborated by the report of the Chemical Examiner, which shews that in the preparation of Eau-de-Cologne, which is essentially a tincture of volatile oils, the use of a strong spirit is absolutely necessary, and that by many formulæ the use of a spirit of 60 O. P. is directed.

4. It would thus appear that it is only the lower qualities of perfumed spirits, *viz.*, those containing a smaller percentage of proof-spirit, which are imported by bazar dealers, and which find a sale as an intoxicant. The

proposal, therefore, to deal with perfumed spirits above a certain strength under the excise rules would operate in exactly the opposite manner to that intended by Government; while the duty of distinguishing between tradesmen who are "respectable," and those who are not, would be an extremely invidious task, and give rise to endless complaints, besides involving the anomaly of one and the same article being treated in the case of one shop as an excisable and in the case of another shop as a non-excisable article.

5. It appears also that there is another insuperable difficulty in the way of dealing with Eau-de-Cologne above a certain strength as an excisable article in the mbfussil, *viz.*, the difficulty of ascertaining its correct strength. The Chemical Examiner reports that the hydrometer cannot be employed for the purpose as the dissolved oils contained in the Eau-de-Cologne influence its indications and render the results unreliable.

6. With reference to the provisions of the new Tariff Act, by which perfumed spirits imported in bottles containing more than four fluid ounces are made subject to duty at the same rate as leviable on spirituous liquors, the Board observe that this measure will practically be inoperative in affording a remedy, owing to the fact that it allows the very class of Eau-de-Cologne bottles —*viz.*, four-ounce phials—the contents of which are commonly used as intoxicants, to escape payment of duty altogether. It was explained in paragraph 6 of the Board's letter No. 74B, dated 31st January last, that 40 phials of this article, containing one gallon, can be purchased for Rs. 6-10-8 at a strength of 21° over-proof, while the cheap-

est kind of brandy, with a strength of 22° under-proof, costs Rs. 12 per dozen, or Rs. 6 per gallon, and that therefore strength for strength the Eau-de-Cologne is considerably the cheaper drink of the two; and the Board accordingly suggested that the liability of perfumed spirits to payment of duty should be made without any restriction as to the size of the phials in which they are imported. The Board still adhere to this opinion.

7. I am desired to add, however, that, with the information before them which has now been obtained, the Board would suggest for consideration whether the proper course would not be to exempt from payment of duty Eau-de-Cologne containing more than a certain percentage of proof-spirit, leaving only the weaker and worse kinds to be assessed with duty without respect to the size of the bottles in which they are imported. From the facts now reported, it seems clear that the Eau-de-Cologne containing a high percentage of proof-spirit is imported only for *bonâ fide* use as a scent, and that its cost is too high to admit of its coming into competition with spirituous liquors as an intoxicant.

It is probable, that a percentage of about 54° or 56° O. P. would be a proper limit to adopt for the purpose proposed, but before determining this point it might be advisable to make further enquiries.

I have the honor to be,
Sir,
Your most obedient servant,

(Sd.) A. FORBES,
Secretary.

From W. H. GRIMLEY, ESQ., *Officiating Collector of Customs, Calcutta, to the Secretary to the Board of Revenue, Lower Provinces,—No.* 363, *dated Calcutta the* 17*th July* 1882.

I HAVE the honour to acknowledge the receipt of your letter No. 233B, dated 7th ultimo, requesting me to state what is the usual percentage of proof-spirit in Eau-de-Cologne and similar perfumes imported by respectable firms.

2. In reply, I beg to forward a copy of a register which has been kept up in this office since the receipt of your letter of all importations of perfumed spirit liable to duty at Rs. 4 per gallon.

3. I observe that the above information is required by the Board with reference to a proposal of Government to place certain restrictions on the sale of Eau-de-Cologne for consumption as a spirituous liquor through the medium of the excise law; and that it has been suggested that this can be done by ruling that Eau-de-Cologne containing less than a certain percentage of proof-spirit may be sold duty-free by respectable tradesmen, but if containing spirit above that standard should be treated as imported liquor and become subject to the law and rules of the Excise Department. My opinion has not been asked upon this question, but I think I may venture to offer the following observations.

4. From the statement submitted, it will be seen that all the importations of perfumed spirits have been above London-proof, containing from 134·3 to 156·1 per cent,

of proof-spirit, and that while the commoner qualities of perfumes have been imported by bazar dealers, marked (*a*) in the statement, the superior qualities have been imported by European firms, marked (*b*), and assuming for the nonce that the latter are the respectable tradesmen and the former not, it will be noticed that the better qualities of perfumes imported by the European or so-called respectable firms, contain the largest quantities of spirit, and as it cannot be assumed that their importations are intended to be used as a drink instead of a perfume, I do not think it is possible to draw a distinction between the importations by European tradesmen and those of bazar dealers, based on the quantity of spirit contained therein in the manner suggested. To rule that perfumes containing less than a certain percentage of proof-spirit should be passed free of duty if imported by respectable tradesmen would be practically inoperative, because the better kinds which are imported by such firms contain the largest percentage of proof-spirit, and are precisely those which are imported for *bonâ fide* use as a scent; and the result of such a rule would probably be a general deterioration in the article imported so as to bring it within the free limit. I am doubtful if it is advisable to adopt any means that would have such an effect.

5. The difficulty of deciding which firms should be considered "respectable" would be a serious objection. The onus of the decision would probably be thrown upon this office, and this would be a most invidious task and always open to objection. Besides it is probable and possible

that two firms, one classed as respectable and the other not, would both import identically the same perfume. In one case the goods would be passed free of duty, whilst in the other they would be taxed, which would hardly be consistent.

6. Another probable effect of such a rule being adopted as proposed would mean a transfer of the trade from all dealers that are not classed as respectable to those that are; for the former would very soon discover that they were not able to compete with the latter, and would either give up the business, or, what would be more likely, purchase from the respectable tradesmen or merchants, and thereby evade the duty altogether, which would give them an advantage which they do not possess and would defeat the very object that Government has in view.

Statement of Perfumed Spirits.

NAME OF IMPORTER.	Name of spirit.	Quantity imported.	Strength.
(*a*) Fazul Ellahie and Hufuzoolah	Rimmel's Lavender ...	$5\frac{138}{160}$ I. gallons ...	39·3 O. P.
(*b*) H. and A. Berens	Eau-de-Cologne ...	12 doz. $\frac{1}{2}$ pints ...	56·1 „
(*a*) Raj Bullub Dhur & Co. ...	Lavender	24 „ phials ...	35·2 „
(*b*) Smith, Stanistreet & Co. ...	Eau-de-Cologne ...	15·17 I. gallons ...	52·9 „
(*b*) The Delhi and London Bank ...	Ditto	2 I. gallons, *viz.*, 12 bottles @ 12 oz. ...	52·3 „
		12 „ „ $5\frac{1}{2}$ „	
(*b*) Watson and Summers ...	Johame Maria Farina	6 qt. „	
	Eau-de-Cologne ...	10 doz. pints $14\frac{64}{160}$ I. G.	55·$\frac{3}{10}$ „
		10 „ $\frac{1}{2}$ „	
(*a*) Sham Chand Shaw & Co. ...	John Gosnell & Co.'s Lavender Water ...	4 doz. @ 6 oz $3\frac{96}{160}$ I. G.	34·$\frac{3}{10}$ „
		2 „ „ 12 „	
(*b*) D. Lattey & Co.	Lavender	$7\frac{128}{160}$ I. G.	39·9 „
	Florida Water ...	$2\frac{64}{160}$ „	47·5 „
(*a*) Alla Bux	Lavender	$5\frac{64}{160}$ „	40·1 „

CUSTOM HOUSE, CALCUTTA,
The 17th July 1882.

W. H. GRIMLEY,
Offg. Collector of Customs.

From Government of Bengal to Board of Revenue.
Excise No. 2245 *T. F. Darjeeling, 22nd Oct.* 1882.

In the last paragraph of your letter No. 704 B., dated the 23rd August last, reporting on the proposal of the Government of India to levy duty on Eau-de-Cologne used for consumption as an intoxicant, it is suggested that Eau-de-Cologne containing a percentage of about 54° or 56° overproof of spirit would be a proper limit to adopt for the purpose indicated.

I am directed to request that the Board will be good enough to submit, with as little delay as possible, definite proposals on the subject after instituting the necessary inquiries.

From Chamber to Board of Revenue.
Calcutta, 21st December 1882.

I have submitted to the Committee of the Chamber of Commerce your letter No. 1341 B. of the 15th instant, relative to the importation of perfumed spirits, Eau-de-Cologne, &c., and I am directed to state in reply, that the Committee cannot, without reference to importers, give any information which would throw light on the subject of the Board's inquiry.

The Committee are of opinion that such reference might be more conveniently made through the medium of the Calcutta Trades Association, but they will lose no time in communicating with those members of the

Chamber who may be importers of the articles in question.

From Board of Revenue to Chamber.

No. 1371 *B. Dated Calcutta, 23rd December* 1882.

EXCISE

H. A. COCKERELL, ESQ., C. S. I.

I am directed to thank you for your letter of the 21st instant, relative to the importation of perfumed spirits, and to say that the Board will await receipt of the further report promised in the last sentence of your letter.

From Chamber to Board of Revenue.

Calcutta, 24th January 1883.

In continuation of my letter of the 21st of last month, relative to the importation of perfumed spirits, I am directed to inform the Board that in the judgment of those who have had experience of that trade, the Collector of Customs in his letter to your address, No. 363 of the 17th July, has given expression to a correct view of the probable effects of the proposal of the Government of India, in the 3rd paragraph of their letter No. 886 of the 6th May. The Collector has shown good cause against the proposed arrangement, and the Board appear to accept his conclusions, supported as they are by professional and scientific reports as to the strength

and quality of perfumed spirits imported by European and Native dealers respectively.

As the former import the genuine and expensive qualities for *bonâ fide* use as scent, containing a high percentage of spirit, and as the latter deal in cheap brands of low percentage, the proposal of the Government of India would impose a severe restriction upon the sale of the former, while the latter which are said to be used, more or less, as intoxicants would be admitted duty-free, and such admission would thus tend to aggravate the mischief against which the Government desire to protect the excise revenue.

It is at the same time represented to the Chamber that the course suggested by the Board does not appear to meet the object had in view, as it would probably stimulate unscrupulous dealers to import in bulk spirits slightly perfumed which could be easily convertible into a palatable beverage: and as the cost of raising spirit from 19 or 20 per cent. overproof to the limit proposed by the Board about 54 or 56 O. P. would be trifling, manufacturers would at once bring up all common perfumes to the required standard and thereby avoid the duty.

To remove the difficulties which a differential appraisement presents, it is suggested for the Board's consideration whether *all* perfumed spirits in bottles should not be rated at a certain duty per gallon, irrespective of the size of bottles or of strength of spirit, on the same principle that obtains in dealing with high and low qualities of Champagne and all other sparkling wines

which are subject alike to the same rate of duty, and on the same principle that duty is levied in the United Kingdom.

This plan, it is said, would obviate the difficulty and inconvenience of having each description tested, and would present its coming into competition with imported and country-made spirituous liquors without interfering, to any material extent, with legitimate trade.

As it would be more difficult to deal with spirits in bulk, it is suggested that it would probably be best to leave the duty as at present.

From Board of Revenue to Chamber.

No. 331*B.* *Dated Calcutta,* 21*st March* 1883.

I am directed to forward for your information the accompanying copy of a letter No. 139 B, dated 19th February, and to request that you will be good enough to favor the Board with an expression of the opinion of the Chamber of Commerce on the proposal made by the Board, in para 5 of their letter, that perfumed spirits imported in bottle should be assessed with duty at an uniform rate of Rs. 6 per gallon (or at an average strength of 50° overproof) without respect to the size of the bottles or strength of liquor.

From A. FORBES, ESQ., *Secretary to the Board of Revenue, L. P., to the Secretary to the Government of Bengal, Financial Department,—No.* 139 *B. Dated Calcutta the* 19*th February* 1883.

EXCISE.

Sir,

I AM directed to acknowledge the receipt of Government order No. 2245T—F, dated 22nd October last, requiring the submission of definite proposals in regard to the suggestion made in paragraph 7 of Board's letter No. 704B, dated 23rd August 1882, on the subject of the taxation of perfumed spirits.

H. A. COCKERELL, ESQ., C.S.I.

2. In reply, I am to say that the Board, on further inquiry, find that the course proposed by them, *viz.*, of exempting from payment of duty perfumed spirits containing more than a certain percentage of proof-spirit, leaving only the weaker kinds to be assessed with duty, will not sufficiently meet the case, for the reason that, as they now learn, the cost of a perfume does not depend so much upon the strength and value of the spirit used in its manufacture, as upon the value of the volatile oils, essences, and other extracts held in it in solution. On this subject the Collector of Customs writes :—

"If, therefore, a limit of strength be fixed, and perfumes containing spirit of strength above that limit be exempted, the manufacturers at home will no doubt be at once instructed to increase the strength of the spirit used in the common and inferior kinds of Eau-de-Cologne, so as to bring them within the free limit, as the increase in strength will enhance but little the cost of the perfume.

The plan adopted by the dealers in the common perfumes when the duty was remitted on bottles of 4-oz. and under, was at once to reduce the size of the bottles, and thereby pass their importations free of duty. No matter what the limit is, I think the dealers will always be able to alter the strength of their perfumes so as to bring them within the free limit, unless it be fixed at pure alcohol, which of course would kill the trade entirely, and is therefore out of the question."

3. This view of the matter is confirmed by the reports received by the Board from the Bengal Chamber of Commerce and the Calcutta Trades Association, copies of which are herewith forwarded for the information of Government. Both of these bodies recommend the levy of customs duty on all spirits, whether perfumed or not, and this is the course which the Board would now advise.

4. It is observed that the Chamber of Commerce suggest that, in order to escape the difficulties connected with an examination and appraisement of perfumed spirits imported in bottles, such spirits should be rated at a certain duty per gallon, irrespective of the size of bottles or strength of spirit; perfumed spirits in wood being rated as at present. This proposal commends itself to the Board on account of its simplicity, and of its rendering unnecessary the constant application of tests which cause much irritation and annoyance to the trade. A somewhat similar practice is, the Collector states, in force in England where perfumed spirit and Eau-de-Cologne when "mixed with any article, so that the degree of strength cannot be ascertained by Sykes' hydrometer,"

are changed with a fixed duty of 16*s.* 6*d.* per gallon, or at the rate levied on alcohol of strength of 60° overproof. The Collector represents that the effect of fixing, in the case of importations into this country, a rate of duty regulated by so high a strength of spirit as 60° over-proof will be to kill the trade in the lower qualities of Eau-de-Cologne, for which he believes there is a large demand in India for *bonâ fide* use as a scent, and he is therefore in favour of fixing the duty according to the average strength of past importations. A register has been kept in the Custom House of these importations since the month of June last. There have been 63 importations of an average strength of 41·4 overproof; but if the quantity of each importation is taken into consideration, the average is reduced to 36·1 overproof, and the Collector therefore proposes to take 37·5 overproof as a fair general average for the assessment with duty of perfumed spirits imported in bottles. This would give a duty of Rs. 5-8 per gallon.

5. Considering the undoubtedly large use as an intoxicant of perfumed spirits in this country, the Board are inclined to think that a nearer approach to the home standard may be made, and they would recommend that perfumed spirits imported in bottles should be assessed with duty at an uniform rate of Rs. 6 per gallon (or at an average strength of 50° overproof) without respect to the size of bottles or strength of liquor; perfumed spirits imported in wood continuing to be assessed as at present.

From Chamber to Board of Revenue.

Calcutta, 31st March 1883.

The Committee of the Chamber of Commerce have had under consideration your letter No. 331 B. of the 21st instant and its annexure, and they desire me to say that they concur in the Board's recommendation as expressed in the 5th para of your letter to the Government of Bengal, that a uniform rate of 6 rupees per gallon be assessed on perfumed spirits imported in bottles without respect to size of bottles or strength of liquor.

AMSTERDAM INTERNATIONAL EXHIBITION

The Committee are glad to report that samples of animal, mineral, and vegetable products, and of manufactured articles, were liberally placed at their disposal by Calcutta exhibitors for transmission to the Exhibition through the Government of India, and they hope exhibitors will receive satisfactory reports upon the various articles contributed by them.

ELECTION OF MAJOR CONWAY-GORDON, R. E., AS HONORARY MEMBER.

The Committee being of opinion that some recognition by the Chamber was due to the

service rendered to the trade of India by Major Conway-Gordon, of the Royal Engineers, the author of a pamphlet lately published in Calcutta on the development of the agricultural resources of this country by means of railway extension and cheap railway communication, they resolved to invite his acceptance of Honorary Membership of the Chamber,—the only compliment which it was in their power to pay him.

Major Conway-Gordon's forcible exposition of the pressing necessity for facilitating and cheapening the transport of Indian products, and specially of the supplies of wheat, which can be materially increased if proper facilities are given for extended cultivation, and development of their consumption in the markets of Europe, and at the same time advancing the prosperity of the agricultural classes, has attracted marked attention in the most influential quarters both here and in England; and it is gratifying to the Committee to find that this able officer of the Government has so warmly at heart a subject of the extremest importance to the commerce of India, and has placed before the public his views regarding it in a manner which has commanded the most attentive consideration.

In asking the Chamber's confirmation of the special step they have taken, the Committee venture to express their confidence that Major Conway-Gordon's association with the Chamber will be attended with advantage to its interests.

NEW MEMBERS.

Messrs. Landale and Morgan and Messrs. Mitchell and Waller have been admitted as members of the Chamber, subject to the usual confirmation.

FUNDS OF THE CHAMBER.

The balance at credit of the Chamber on the 30th April 1883, amounted to Rs. 349-0-2 exclusive of Rs. 15,000 in 4 per cent. Government Securities.

J. J. J. KESWICK,
President.

FUNDS OF THE CHAMBER.

Statement of the Funds of the Bengal Chamber of Commerce, from 1st November 1882 to 30th April 1883.

To Office Rent			900	0	0	Cash in Bank of Bengal on 31st October 1882		49	12	2
„ Establishment			5,451	0	0	Government Securities		15,000	0	0
„ Charges General... ...			4,196	0	9					
„ Sundries			577	6	8		Rs.	15,049	12	2
	Rs.		11,124	7	5					
						Subscriptions ...	7,304	0	0	
						Price Current and other Publications ...	2,781	0	6	
Cash in Bank of Bengal	349	0 2				Interest on Government Securities	300	0	0	
Reserve in Government Paper	15,000	0 0				Sundries	1,038	10	11	
			15,349	0	2			11,423	11	5
	Rupees		26,473	7	7		Rupees	26,473	7	7

10

CALCUTTA,
30th April 1883.

E. E.

H. W. I. WOOD,
Secretary.

APPENDIX.

TONNAGE SCHEDULE for the PORT OF CALCUTTA, adopted at a Special General Meeting of the Bengal Chamber of Commerce, held on the 12th February 1872, with effect from 1st September 1872, except as regards the measurement of Cotton, Hemp, Jute, Jute Cuttings, Rhea, Safflower, and other articles similarly packed, which, under the Chamber's Resolution of 14th June 1872, had effect from 1st July 1873.

ARTICLES.	Cwt. per Ton Nett.	Cubic Feet per Ton.
Aloes, in bags and boxes	20	.....
Alum, in ditto	20	.....
Aniseed, in bags	8	.....
Arrowroot, in cases	.....	50
Arsenic, in bags or cases	20	.....
Asafœtida, in bags and boxes	20	.....
Apparel, in boxes	.....	50
Bark, in bags	8	.....
Bees' Wax	20 gross.	
Barilla	20	.....
Betel-nut	20	.....
Books	.....	50
Borax	20	.....
Bran	14	.....
Brimstone	20	.....
Bullion	at per cent.	
Cake-lac, in bags	16	.....
Camphor, in cases	.....	50
Cardamoms in robins	8	.....
„ boxes	.....	50
Cassia, in boxes	.....	50
„ bags	12	.....
Castor Seed	15	.....
Chillies (dry), in bags	8	.....
China Root, in bags	11	.....
„ boxes	.....	50
Chiretta	.....	50
Churrah	14	.....
Cigars	.....	50
Cloves, in bags	8	.....
„ boxes	.....	50
Coals	20	.....
Cochineal	.....	50
Coffee, in bags	18	.....
„ casks	16	.....

ARTICLES.	Cwt. per Ton Nett.	Cubic Feet per Ton.
Coral, rough	20	.....
Coir, loose and unscrewed	12	.....
Copras, or Cocoanut Kernel	14	.....
Coriander Seed	12	.....
Cotton	5 bales not exceeding	52
Cowries	20	.....
Cummin Seed	8	.....
„ Black	8	.....
Cutch, in bags	18	.....
Dates, wet	20	.....
„ dry	16	.....
Dholl	20	.....
Elephants' Teeth, in bulk	20	.....
Furniture	.....	50
Garlic and Onions	12	.....
Ginger	16	.....
Gram	20	.....
Gums, in cases	.....	50
Gunny Bags and Gunny Cloth	.....	50
Gunjah	.....	50
Hemp	5 bales not exceeding	52
Hides, Buffalo, or Cow, cured	14	.....
Hoofs, Horn Shavings and Tips	20	.....
Horns, Cow, Buffalo, or Deer	20	.....
India Rubber, in bags	16	.....
„ cases	.....	50
Indigo	.....	50
Iron	20	.....
Jute	5 bales not exceeding	52
Jute Cuttings	5 bales not exceeding	52
Lac Dye	.....	50
Lard	20 gross.	
Linseed	20	.....
Mace	.....	50
Machinery	20	.....
Metals	20	.....
Mathie Seed	18	.....
Mirabolams	16	.....
Molasses	2 puncheons or 4 hhds.	
Mother o'Pearl, in bags	20	.....
„ chests	20	.....
Munjeet	.....	50
Mustard or Rape Seed	20	.....
Niger Seed	20	.....
Nutmegs, in cases or casks	.....	50

ARTICLES.	Cwt. per Ton Nett.	Cubic Feet per Ton.
Nux Vomica	16	.....
Oats	16	.....
Oil, in cases	.....	50
„ casks	4 hhds.	
Opium	per chest.	
Paddy	16	.....
Palmatine, in bags	16	.....
Peas	20	.....
Pepper, Long	12	.....
„ Black	14	.....
Planks and Deals	.....	50
Poppy Seed	20	.....
Putchuck	10	.....
Rags	.....	50
Raw Silk, in bales	10	.....
Rattans for dunnage	20	.....
Red Wood, ditto	20	.....
Rhea	5 bales not exceeding	52
Rice	20	.....
Rope, in coils	.....	50
„ Lines and Twines, in bundles	16	.....
Rum, in casks	2 puncheons or 4 hhds.	
Safflower	.....	50
Sago, in cases	.....	50
Sal-ammoniac, in bags	20	.....
„ boxes	20 gross.	
Saltpetre	20	.....
Salt	20	.....
Sapan Wood for dunnage	20	.....
Sealing Wax, in cases	.....	50
Seed-lac, in cases	.....	50
„ bags	16	.....
Senna	.....	50
Shells, rough, in bags	20	.....
Shell-lac, in cases	.....	50
„ bags	16	.....
Silk Chussum	.....	50
„ Waste	.....	50
Silk Piece-Goods	.....	50
Skins	14	.....
Soap, country, in cases	.....	50
„ bags	15	.....
„ bar	20	.....
Stick Lac, in cases	.....	50
„ bags	16	.....

ARTICLES.	Cwt. per Ton Nett.	Cubic Feet per Ton.
Sugar	20	.....
Tallow, in cases or casks.	20	.....
Talc	20	.....
Tamarinds, in cases or casks ...	20	.....
Tapioca	.....	50
Tea	.....	50
Teel Seed	20	.....
Timber, round	.....	40
" squared	.....	50
Tincal	20	.....
Tobacco, in bales	16	.....
Tortoise Shells, in chests	.....	50
Turmeric	16	.....
Wheat	20	.....
Wool	.....	50

1. Goods in Casks or Cases to be calculated gross weight when paying freight by weight; and where freight is made payable on measurement, the measurement be taken on the Custom House wharf, or other shipping wharf within a radius of 5 miles from the Custom House, except in the case of Cotton, the measurement of which shall be taken at the Screw-house.

2. Measurement to be taken at largest part of the bale,—inside the lashing on one side, and outside on the other.

3. Jute, Jute Cuttings, Hemp, Cotton, Safflower, and other articles similarly packed, are screwed in bales varying from 300 to 400lbs.

4. The term "dead weight" shall be understood to mean the following articles:—Sugar, Saltpetre, Rice, Wheat, Gram, Dholl, Peas, Linseed, Rapeseed and all Metals.

☞ By a Resolution of a General Meeting of the Chamber held on the 31st May 1881, the Tonnage Schedule was forthwith amended as regards Jute, Jute Cuttings, Cotton, Hemp, and Rhea Fibre, the ton of each of which was altered from 50 cubic feet to 5 *bales not exceeding 52 cubic feet.*

H. W. I. WOOD,
Secretary.

SCHEDULE OF COMMISSION CHARGES

Revised and adopted by a Special General Meeting of the Bengal Chamber of Commerce, held on the 18th June 1861,—with effect from 1st January 1862.

1.	On the sale, purchase, or shipment of Bullion, Gold Dust or Coin	1	per cent.
2.	On the purchase (when in funds) or sale of Indigo, Raw Silk, Silk Piece-Goods, Opium, Pearls, Precious Stones, or Jewellery	2½	„
3.	On purchasing ditto when funds are provided by the Agent	5	„
4.	On the sale or purchase of all other goods—the commission in all cases to be charged upon the gross amount of sales, and in regard to purchases upon both cost and charges ...	5	„
5.	On returns for Consignments if made in produce ...	2½	„
6.	On returns of Consignments if in Bills, Bullion, or Treasure	1	„
7.	On accepting Bills against Consignments ...	1	„
8.	On the sale or purchase of Ships, Factories, Houses, Lands, and all property of a like description ...	2½	„
9.	On goods and treasure consigned, and all other property of any description referred to Agency for sale, whether advanced upon or otherwise, which shall afterwards be withdrawn; and on goods consigned for conditional delivery to others and so delivered, on invoice amount at 2*s.* per rupee	half com.	
10.	On making advances or procuring loans of money for commercial purposes, when the aggregate commission does not exceed 5 per cent. ...	2½	per cent.
11.	On ordering, or receiving and delivering goods, or superintending the fulfilment of contracts, or on the shipment of goods, where no other commission is derived	2½	

12. On guaranteeing Bills, Bonds, or other engagements, and on becoming security for administration of Estates, or to Government for the disbursement of public money .. .. 2½ per cent.
13. On *del-credere*, or guaranteeing the due realization of sales ... . 2½ ,,
14. On the management of Estates for Executors or Administrators ... ... 2½ ,,
15. On chartering ships or engaging tonnage for constituents for vessels to proceed to outports for loading ... ... 2½ ,,
16. On advertising as the Agents for Owners or Commanders of ships for Cabin passengers, on the amount of passage money, whether the same shall pass through the Agent's hands or not ... 2½ ,,
17. On procuring freight for a ship by a shipping order or charter, or on procuring employment for a ship on monthly hire, or acting as Agents for owners, Captain, or Charterers of a vessel, upon the gross amount of freight, brokerage inclusive ... 5 ,,
18. On engaging Asiatic Emigrants for a ship to the Mauritius, the West Indies, or elsewhere, upon the gross amount of earnings ... ... 5 ,,
19. On engaging troops for a ship to Great Britain or elsewhere, on the gross amount of passage money for rank and file ... ... 2½ ,,
20. On realising inward freight, inward troops, Emigrant, or Cabin passage money ... ... 2½ ,,
21. On landing and re-shipping goods from any vessel in distress, or on landing and selling by auction damaged goods from any such vessel, and acting as Agent for the Master on behalf of all concerned, on the declared value of all such goods as may be re-shipped, and on the nett proceeds of all such goods as may be publicly sold ... 5 ,,

If Opium, Indigo, Raw Silk, or Silk Piece-Goods ... 2½ ,,
If Treasure, Precious Stones, or Jewellery ... 1 ,,

22. On effecting Insurances, whether on lives or property ... ... 2½ per cent.
23. On settling Insurance claims, losses, and averages of all classes, and on procuring returns of premium ... ... 2½ ,,
24. On drawing, purchasing, selling, or negotiating Bills of Exchange ... ... 1 ,,
25. On debts or other claims when a process at law or arbitration is incurred in claiming them ... 2½ ,,
Or, if recovered by such means ... ... 5 ,,
26. On Bills of Exchange returned dishonored ... 1 ,,
27. On collecting House Rent ... ... 2½ ,,
28. On ship's Disbursements ... ... 2½ ,,
29. On realising Bottomry Bonds, or negotiating any loan on *respondentia* ... ... 2½ ,,
30. On granting Letters of Credit ... ... 1 ,,
31. On sale or purchase of Government Securities and Bank or other Joint Stock Shares, and on every exchange or transfer not by purchase from one class to another ... ... ½ ,,
32. On delivering up Government Securities and Bank or other Joint Stock Shares, on the market value. ½ ,,
33. On all amounts debited and credited within the year (less the balance brought forward) upon which no commission amounting to 5 per cent. has been charged ... ... ½ ,,

☞ Brokerage when paid is to be separately charged.

H. W. I. WOOD,
Secretary.

CONVERSION OF STERLING FREIGHT INTO INDIAN CURRENCY.

The following Resolutions were adopted at a General Meeting of the Chamber, held on the 17th January 1882.

"That the Resolutions adopted, 31st May 1876, respecting "conversion into Indian currency of sterling freight "and commission thereon be hereby rescinded, and "that the following Resolutions be substituted in "their stead, with immediate effect, *viz.* :—

1. "That, in the absence of any stipulation to the "contrary, sterling freight payable in Calcutta, in- "cluding differences of freight adjusted in Calcutta, "and all commissions on sterling freight made pay- "able at Calcutta or there brought into account, "shall be reduced into Indian money at the rate of "exchange for Bank Bills on London on demand "which shall have been current on the mail-day "next preceding the day when the amount to be "dealt with shall be ascertained.

2. "That, in the absence of anything to the contrary ex- "pressed, the words 'current rate of exchange' shall "be held to mean the rate current for Bank Bills on "London payable on demand.

3. "That, for the purpose of charging commission or "adjusting differences, freight expressed in dollars "(American) shall be converted into sterling at a "uniform rate of fifty pence per dollar.'

Forms of Bill of Lading and Boat Note as adopted at a General Meeting of the Chamber of Commerce, on the 17th January 1880.

Shipped in good order and well-conditioned,

by _____

in and upon the good Ship or Vessel called the _____

whereof is Master for this present Voyage _____

and now lying in the Port of Calcutta and bound for _____

_____

being marked and numbered as in the margin, and to be delivered, in the like good order and well-conditioned, at the aforesaid Port of _____

(The Act of God, the Queen's Enemies, fire, and all and every other dangers and accidents of the Seas, Rivers, and Navigation of whatever nature and kind soever excepted)

unto _____

or to _____ Assigns, Freight for the said Goods being payable as customary _____

_____

_____

with Average accustomed. In Witness whereof, the Master or Agents of the said Ship hath affirmed to _____ Bills of Lading, all of this tenor and date, one of which being accomplished, the others to stand void.

Dated in CALCUTTA, this _____ day of _____ 18

Weight and Contents unknown.

No.....

Calcutta,.....18.....

To

THE COMMANDING OFFICER OF THE

Ship.....

SIR,

Please receive on board the undernoted Goods from Messrs.....

and grant a clean receipt for the same.

N.B.—This cargo is only shipped on the special understanding that the Chief Officer will sign for all counter or quality marks and numbers, and the Bales or Packages are not to be taken on board except on these terms, and also when a Sircar is in attendance to check the tally.

In case of any dispute, the Shippers request prompt information in writing from one of the Officers of the ship.

Marks and Numbers.	Number of Packages.	Description of Goods.	

No. .....

Calcutta, ... 18 .....

Received on board the ship ..... in good order and condition the undermentioned Goods from Messrs. .....

.....

N. B.—The Chief Officer is requested not to take in any package unless he is prepared to sign for all the qualifying marks and numbers.
All packages in bad order must be returned.

Marks and Numbers.	Number of Packages.	Description of Goods.	

Arrived alongside .....
Discharged .....
Returned .....
Remarks .....

(Signature) .....
Chief Officer.

Ship .....
Moorings .....

MEMBERS OF THE CHAMBER OF COMMERCE.

Agelasto, A., and Co.
Apcar and Co.
Anderson, Wright and Co.
Acerboni, F., and Co.
Barlow and Co.
Begg, Dunlop and Co.
Burn and Co.
Barry and Co.
Balmer, Lawrie and Co.
Campbell, J., Esq., *Manager, National Bank of India.*
Carlisles, Nephews and Co.
Carritt and Co.
Crooke, Rome and Co.
Cohn Brothers and Fuchs.
Duncan Brothers and Co.
Dwarkanath Dutt and Co.
Ernsthausen and Oesterley.
Ewing and Co.
Elliott John. and Co.
Ezra, E. D. J., Esq.
Finlay, Muir and Co.
Gisborne and Co.
Graham and Co.
Grindlay and Co.
Gubboy, Elias S., Esq.
Hantelmann and Co.
Harper, G., Esq., *Agent, Oriental Bank Corporation.*
Henderson, George, and Co.
Heilgers, F. W. and Co.
Hoare, Miller and Co.
Huber and Co.
Hobson, Conor and Co.
Jardine, Skinner and Co.
Jefferson, W. E. S. Esq., *General Manager. The Planters Stores and Agency Company, Limited.*
Kettlewell, Bullen and Co.
Kelly and Co.
Ker, Dods and Co.
King, Hamilton and Co.
King, W. Vale and Co.
Longmuir, Thos., Esq., *Manager, Delhi & London Bank, Limited.*
W. A. Main, Esq., *Acting Agent Chartered Bank of India, Australia, and China.*
Morriss, E., Esq., *Agent, Hong-Kong and Shanghai Banking Corporation.*
R. Murray, Esq., *Agent. Chartered Mercantile Bank of India, London and China.*
Mitchell, Reid and Co.
Mackillican, J., and Co.
Mackinnon, Mackenzie and Co.
Mackenzie, Lyall and Co.
Macneill and Co.
Macknight, Anderson and Co.
McIntosh, A. R., and Co.
Moran, W., and Co.
Oldemeyer and Hadenfeldt.
Payn, T., Esq., *Manager, Comptoir d'Escompte de Paris.*
Petrocochino Brothers.
Prawnkissen Law and Co.
Prestage, F., Esq., *Agent, Eastern Bengal Railway Company.*
Pigott, Chapman and Co.
Pallachi, F. C. and Co.
Ralli Brothers.
Ralli and Mavrojani.
Reinhold and Co.
Rentiers and Co.
Schroder, Smidt and Co.
Schoene, Kilburn and Co.
Sassoon, David and Co.
Shaw, Finlayson and Co.
Salugram Khunnah and Co.
Steel, Octavius and Co.
Struthers and Co.
Thomas, J., and Co.
Turner, Morrison and Co.
Ullmann, Hirschhorn and Co.
Uloth, H. W. Esq., *Superintendent, P. & O. Company.*
Whitney, Brothers and Co.
Williamson, Magor and Co.
Wood, W. Esq., *Manager, Agra Bank.*
Yule, Andrew and Co.

Honorary Member :

J. A. Crawford, Esq., C. S., late Collector of Customs.

RULES AND REGULATIONS

OF THE

BENGAL CHAMBER OF COMMERCE.

First ..... That the Society shall be styled "THE BENGAL CHAMBER OF COMMERCE."

Second... That the object and duty of the Bengal Chamber of Commerce shall be to watch over and protect the general commercial interests of the Presidency of Bengal, and specially those of the port of Calcutta; to employ all means within its power for the removal of evils, the redress of grievances, and the promotion of the common good; and, with that view, to communicate with Government, public authorities, associations, and individuals; to receive references from, and to arbitrate between, parties willing to abide by the judgment and decision of the Chamber; and to form a code of practice to simplify and facilitate transaction of business.

Third.... That merchants, bankers, ship-owners, and brokers shall alone be admissible as members of the Chamber.

Fourth... That candidates for admission as members of the Chamber shall be proposed and seconded by two members, and may

be elected by the Committee provisionally, such election being subject to confirmation at the next ensuing General Meeting.

Fifth..... That the subscription of firms and banks shall be 16 rupees per mensem, of individual members 10 rupees per mensem, and of mofussil members 32 rupees per annum.

Sixth..... That any member of the Chamber whose subscription shall be three months in arrears shall cease to be a member, and his name shall be removed by the Committee from the list of members after one month's notice of such default.

Seventh... That the business and funds of the Chamber shall be managed by a Committee of not less than five nor more than seven members, including the President and Vice-President, to be elected annually at a General Meeting of the Chamber in the month of May; the President, or, in his absence, the Vice-President, being ex-officio Chairman of the Committee, and in the absence of the President and Vice-President, the Committee to elect its own Chairman. Three to form a quorum.

Eighth... Annual elections of President, Vice-President, and members of the Com-

mittee shall be determined by a majority of votes of members, such votes being given in voting cards to be issued by the Secretary, numbered and bearing his signature; and no voting card shall be received for such purpose unless so authenticated. All vacancies created by the absence of the President, or Vice-President, from the Presidency for three months, or by departure for Europe, or by death, shall be forthwith filled up, and the election determined by votes to be taken as above and declared by the Committee. All vacancies created as above by the absence, departure, or death of any of the members of the Committee shall be forthwith filled up by selection by the Committee, subject to approval at first ordinary general meeting thereafter.

☞ *It is specially requested that before a member is returned to serve on the Committee, his nominator shall have ascertained his willingness to accept office in the event of his election by voting cards.*

Ninth..... That parties holding powers of procuration shall, in the absence of their principals, be eligible to serve as members of the Committee.

Tenth..... Two members of a firm or representatives of a bank shall not serve on the Committee at the same time.

Eleventh. That the Committee shall meet for the purpose of transacting such business as may come within the province of the Chamber at such times as may suit their convenience, and that the record of their proceedings be open to the inspection of members, subject to such regulations as the Committee may deem expedient.

Twelfth. That all proceedings of the Committee be subject to approval or otherwise of General Meetings duly convened.

Thirteenth. That a half-yearly report of the proceedings of the Committee be prepared, printed, and circulated for information of members three days previous to the General Meeting at which such report and proceedings of the Committee shall be submitted for approval.

Fourteenth. That the Secretary shall be elected by the Committee; such election to be subject to confirmation at the next ensuing General Meeting.

Fifteenth. That General Meetings of the Chamber shall be held at such times as the Com-

mittee may consider convenient for the despatch of business.

Sixteenth. That any number of members present shall be held to constitute a General Meeting, called in conformity with the Rules of the Chamber for the despatch of ordinary business.

Seventeenth. That on the requisition of any five members of the Chamber, the President, or, in his absence, the Vice-President, or Chairman of Committee, shall call a Special General Meeting, to be held within 15 days subsequent to receipt of such requisition.

Eighteenth. That every subscribing firm or bank shall be entitled to one vote only, and that the Chairman of Committee and Chairman of General Meetings and Special General Meetings shall have a casting vote in cases of equality of votes.

Nineteenth. That parties holding powers of procuration shall, in the absence of their principals, be entitled to vote.

Twentieth. That voting by proxy shall be allowed; provided proxies are in favour of members of the Chamber.

Twenty-first. That the Chamber reserves to itself the right of expelling any of its members;

such expulsion to be decided by the votes of three-fourths of members present in person or by proxy at any Special General Meeting of the Chamber convened for the consideration of such expulsion.

Twenty-second. That strangers visiting the Presidency may be admitted by the Committee as honorary members for a period not exceeding two months.

Twenty-third. That no change in the rules and regulations of the Chamber shall be made, except by the votes of a majority of the members of the Chamber present in person or by proxy at a Special General Meeting to be held after previous notice of three months.

CALCUTTA:
Printed by Thos. S. Smith, City Press, 12, Bentinck Street.

REPORT

OF

THE COMMITTEE

OF THE

BENGAL CHAMBER OF COMMERCE.

From 1st May to 31st December 1883.

CALCUTTA:
PRINTED BY THOMAS S. SMITH, CITY PRESS,
12, BENTINCK STREET.

1884.

INDEX TO THE REPORT.

SUBJECTS:	Page.
Bengal and Nagpore Railway	1
Site for the East Indian Railway Bridge	83
The Puttiala State Railway	86
Jail Manufactures	88
Bill to Amend the Law relating to Steamships and Inland Steam Vessels	91
The Native Passenger Ships Act	110
Indian Ports Act of 1875...	115
Rules under Sea Customs Act for Coasting Vessels ...	117
Inspection of Prime-Movers	120
Arrest of Persons to give evidence before Marine Courts for Trial of Pilots	124
Hospital Dues Fund	126
Pilotage Receipts and Disbursements	158
The Basses and Minicoy Light Dues...	171
Tonnage Schedule and Rules for the Measurement of Baled Cargo	182
Employment of Anglo-Indians and Eurasians in the Pilot Service	200
Leniency of Sentences passed on Crews of British Vessels charged with Serious Offences	219
Pilot Brigs at the Sandheads	240
Inadequate Docking Accomodation for the Port of Calcutta...	246
Government Stock-Notes	251
Telephone Service	254
Stamping Duplicate Receipts	256
Publication of Monthly Statements of Railway Traffic ...	265
Development of Indian Wheat Trade	267
Wheat Cultivation	273
Government Resolution on Port Commissioners' Administration Report for 1882-83	284
Government Resolution on Port Officer's Report for 1882-83	301
New Members...	308
Funds of the Chamber	*ib.*

INDEX TO THE APPENDIX.

Subjects:	Page.
Members of the Chamber	iii
Rules and Regulations of the Chamber	iv
Schedule of Commission Charges	x
Tonnage Schedule and Measurement Rules for the Port of Calcutta	xiii
Forms of Sailing Ship Bill of Lading and Boat Note ...	xvii
Conversion of Sterling Freight into Indian Currency ...	xx

Proceedings of a General Meeting of the Bengal Chamber of Commerce, held on Thursday the 29th of May 1884.

Mr. J. J. J. Keswick, the President, having taken the Chair, addressed the Meeting as follows :—

GENTLEMEN,—You have had the voluminous report of the Committee for the eight months ending 31st December last before you for some time, and, in moving that it be adopted, it is not necessary for me to trouble you with more than a very few remarks.

You will note that the subject of railway extension has the first place in the report, and occupies 83 of its 308 pages. The subject of railway extension in India is one which continues to receive much attention, both here and at home, and you will have observed that the evidence given before the present Parliamentary Committee confirms our assertion of last year, that no satisfactory progress will be made in opening up this country with railways until Government recognize that the necessary capital cannot be raised without a permanent guarantee of interest. We may, I think, expect that the evidence given

will lead to a more liberal annual provision of funds for the construction of new railways, and that the Bengal and Central Provinces line, the great importance of which is generally admitted, will be about the first to be undertaken. The report and estimate prepared by Mr. Spring, and handed by the Government to the Chamber, on the direct route for the line named, and Mr. Parker's abstract estimate of the probable cost of a broad gauge railway from Sitarampur to Bilaspur, with papers in connexion, will have been read by you with much interest. Your Committee have not been satisfied that the most which can be put forward in favour of the direct route to the Central Provinces has been put forward, but they are glad to see the question of extension of railways now taken up in earnest by the Government, and hope that Calcutta will soon be in communication with the said Provinces by one route or other. The saving in distance which the direct route shows is an important matter, and I am sure the experience which the Calcutta merchants have had of the East Indian Railway Company is not such as to make them desire to see it command all the traffic west of the Hughli. One has only to read of the loss to the Oudh and Rohilkhand Railway Company in the last season, estimated by the Agent at Rs. 2,50,000, caused by the insufficient carrying

power of the East Indian Railway to make one wish to avoid having any new line opening up important traffic in any way dependent upon the latter. It is true that the much increased accommodation which the Port Commissioners have provided on the Howrah side of the river from the present railway wharves to Shalimar Point, and which they have arranged to put at the disposal of the East Indian Railway Company, should enable consignments to be given prompt delivery of in future, and the bridge across the river Hughli at Hughli is being rapidly proceeded with, which will before long put the East Indian Railway in connexion with the new wet docks which have been sanctioned to be built at Kidderpur, but the East Indian Railway Company has not in the past been managed to suit the requirements of the times, and I do not expect it will be so managed in future, so long as it has the monopoly of transport from the country west of the Hughli to Howrah or Calcutta. In the past it has not increased its carrying powers in proportion to the increase of trade. Many years ago we heard of grain lying rotting at its stations through its inability to carry it, and the recent complaint against it by the Oudh and Rohilkhand Railway shows what little effect past experience has had on it. I believe the fact is that the East Indian

Railway Company has been so greedy of profits that it has not readily faced the outlay for additional rolling-stock and engine-power required to cope with its increasing traffic. Instead of keeping pace with the growing trade, it appears to have only acted when the pressure of trade has compelled it to do so. It has allowed its safety in monopoly to beget a short-sightedness inimical to its own interests. I look upon it as of very great importance to the country and to the mercantile community, in Calcutta to have another railway system from the North-West with independent access to Calcutta, and until there is healthy competition you are not likely to see the East Indian Railway Company reduce its rates further than Government can compel it to reduce them. Its coal rates require to be reduced now, and if it has sufficient rolling-stock it appears to be in its own interests to reduce them, but I understand Government has not the power to insist on a reduction. I hope, then, that we shall see a South Eastern extension of the Oudh and Rohilkhand Railway join a Central Provinces line, and enter Calcutta independent of the East Indian Railway. In other countries great traffic has been created by railways having independent entries into capitals, and there is no reason to expect other results here. It seems to be generally admitted that the railway bridge across

the Hughli is being constructed in the wrong place, but the public did not cry out soon enough, and work in connexion with it was too far advanced to permit of the site being changed. I understand the erection of the bridge is proceeding rapidly, and the sooner it is completed now the better. It is believed that another railway bridge will eventually have to be built in the neighbourhood of Cossipur, and perhaps it may suit our second railway system to enter the capital there.

You will have observed a notification in the *Calcutta Gazette* of 21st instant, to the effect that the Lieutenant-Governor of Bengal is pleased to exempt all vessels entering the Port of Calcutta from the levy of port dues with effect from the 1st April 1884, and it is matter for congratulation that by the management of the Port Commissioners the port is now free. In ten years the Commissioners have made a reduction in port charges equivalent to 8¼ annas per ton, which represents on the present net tonnage of sea-going vessels entering the port a saving of about Rs. 7,50,000 per annum.

Pilotage, however, is still a heavy charge, and there have been complaints from shipowners at home that the service is insufficient for the Hughli.

We shall probably hear shortly what conclusion the Committee appointed to inquire into the system of Special Pilots have arrived at, but it appears to many that if more use were made of Master Pilots, and the service better regulated, the present numerical strength of the service would be found quite sufficient. I am of opinion that with proper management the burden of pilotage might be considerably lightened. The Government have been good enough to favour the Chamber with a statement of receipts and charges on account of pilotage for the year 1881-82, shewing a balance at credit of Rs. 94,819-13-3, but "extreme pressure of work existing and prospective" prevents the Government from giving a similar statement asked for by the Chamber for the three previous years, or to state what the approximate balances of those years were. It appears that there is no separate head under which to record charges on account of pilotage in the books of the Accountant General's Office, that the whole transactions are recorded under several minor heads under the major head of Marine, and that it is not possible for that office to separate the items relating to pilotage only. To give the information the Chamber wants then, the accounts would have to be recast, as those of 1881-82 have been, and time cannot be afforded for this.

We may conclude, however, that for years past the pilotage account has shown a large credit balance annually. I think the Chamber should urge the Government to transfer the Pilot service to the Port Commissioners, so that a proper account may be kept, and receipts and expenditure watched in the interests of the port in future. The transfer would probably result in a considerable reduction of the pilotage charges at no distant date, *and that without in any way affecting the pay of the pilots.* Regarding pensions, I think improved pension rules could be arranged for them. If the Port Commissioners took the place of the Port Officer, many charges which are now necessary under the separate department of the latter would be saved.

There still appears to be a shortness of serviceable pilot brigs. A new one, the *Sarsuti*, was recently got out from home, regarding which a writer in the *Englishman*, dated 16th April, says :—

"The new brig, the *Sarsuti*, arrived in port on the 26th September 1883. Her construction, so far as her internal fittings, is quite unsuited for the service for which she was built. It may be as well to state here, that when it was generally known amongst the members of the Pilot Service that a new brig was ordered, two senior members, both Branch pilots, had an interview with Captain Stiffe, and

proposed that the senior pilot at home on leave should superintend her fittings and general equipment, and, most strange to say, that whilst this was proposed here, one of the then absent Branch pilots who was at home on leave wrote to Captain Stiffe, offering him his services, pointing out that each brig that had been built for the service had had to undergo some alteration on arrival, causing unnecessary expense to Government.

This officer's services were declined with thanks by the Port Officer. Captain Stiffe took charge as Port Officer, 5th August 1879, and went on furlough 31st March 1883, resumed charge 7th April 1884. Captain Brebner acted for him from 1st April 1883 to 7th April 1884. When the *Sarsuti* arrived, Captain Brebner was acting Port Officer. A Survey Committee was ordered and held on board, who were of opinion that the vessel was unfit for her duties on account of her internal fittings. In the face of this, inexplicable as it may appear, she was ordered to proceed to sea on an experimental trip, which occupied from 21st December 1883 to 13th February 1884. During her cruise at the Sandheads, another Committee, composed of three Branch pilots and three senior Master pilots, was held. They reported her unfitness, and specified the necessary alterations under 72 different heads. The *Sarsuti* returned to port on the 13th February last, and not until the 19th March was any survey held by the Dockyard authorities, with a view of preparing the cost of alterations, and up to date nothing further has transpired, and no alteration of any kind has been taken in hand. Why the experimental trip was ordered seems unintelligible, as the time wasted then, and since

her arrival in port, is now being seriously felt, for had her alterations been promptly taken in hand on her first arrival in September last she would be cruising at the Sandheads, in company with the *Coleroon*, instead of this vessel being the only brig at the Sandheads, a subject so prominently brought to the notice of the Lieutenant-Governor by the Calcutta Chamber of Commerce collectively, as well as by some merchants and agents individually, these representations receiving immediate reply from the Bengal Government."

The Chamber addressed the Government with reference to this letter, and a reply received, dated 22nd instant, reads as follows :—

"With reference to your letter of the 7th May 1884, I am directed to state, for the information of the Chamber of Commerce, that the anonymous letter, on the subject of Pilot vessels at the Sandheads, which appeared in the *Englishman* of the 16th April last, attracted the attention of Government on its publication. Certain portions of the anonymous letter were undeserving of attention, but that portion of it referring to the presence of only one brig at the Sandheads caused the Lieutenant-Governor to communicate with the Port Officer, who shortly afterwards despatched the new Pilot brig, the *Sarsuti*, to reinforce the *Coleroon* at the Sandheads, the *Cassandra* being under the usual periodical repairs. By a telegram just received, the Lieutenant-Governor regrets to learn that the *Coleroon* has met with an accident, and is obliged to return to town. Telegraphic orders have already issued to the Port Officer to expedite the repairs of the *Cassandra* and despatch her to reinforce the

Sarsuti. The *Sarsuti*, I am to add, has been pronounced to be an excellent vessel, some alterations of her internal fittings being alone required. These will be completed when she returns to Calcutta. In conclusion, I am to intimate that the recent overhauling of the Pilot vessel *Cassandra* has shewn that after certain repairs have been completed, she will be fit for service as a Pilot vessel for the next five years."

At present there is only one vessel, the *Sasruti*, at the Sandheads, but the *Coleroon* which met with an accident and has had to be repaired will be on her station again in a day or two.

Some correspondence has passed between the Chamber and the Government of Bengal regarding the Hospital Port Dues Fund. I think the Chamber has shewn clearly that there should be no necessity for enhancing the dues, and it would be interesting to learn how the money collected by the Government under the head of hospital dues has been disposed of. So far as can be judged from the shipping returns, there must be an annual surplus of some Rs. 30,000 after paying the actual hospital fees, and we know from past experience how arbitrarily funds raised from the shipping and other trade of this port are sometimes dealt with; witness a donation some years ago of Rs. 10,000 from the Hospital Dues Fund to the Nurses' Institution (a grant in itself not objected to, if the amount had only

been proportioned to the number of the seamen admitted to the hospital as compared with other patients), and witness transfers of money raised by Jute Warehouse License fees and at credit of Fire Brigade Fund—of Rs. 16,552 to Alipur Lock Hospital, Rs. 10,000 to Alipur Municipality, and Rs. 60,000 to a fund for widening the Chitpur road so as to make it suitable for the tramway, the introduction of which has given the Corporation a handsome sum annually. These transfers show a shameful misappropriation of funds. With cases like these before them, although they occurred years ago, the mercantile community of this expensive port may well show anxiety to know what becomes of surplus pilotage charges, hospital dues, &c. An error has crept into the Chamber's report regarding quarantine officers in other ports not being a direct charge on the shipping. It appears that they are a direct charge on the shipping.

I think we have reason to congratulate ourselves on the success which has attended the introduction of a comprehensive system of authorised measurers, for which introduction much credit is due to Mr. J. Stevenson of Messrs. Graham and Co., who devoted so much care to the matter while on the Chamber's Committee. The system is a great improvement on the former custom, and

is fairer and more satisfactory both to the shippers and the ships.

I do not think it necessary to refer to the many other subjects in the report, some of which are very important, but in passing I may remark that it is to be regretted that a Resolution by Lord Ripon's Government, which we have been able to so much approve of, as that prohibiting steam machinery in jails to compete with private concerns, has been vetoed by the Secretary of State. Several interesting and important matters also, among which I may mention wet docks and a new petroleum depôt, have engaged the attention of the Chamber, subsequent to the period for which the report has been written, and these will be referred to in the next publication. You are aware that the docks are to be at Kidderpur and the petroleum depôt at Budge-Budge, and I think both sites will prove convenient.

When the half-yearly General Meeting was held in August last, the Committee consisted of Messrs. J. J. J. Keswick (President), W. Bleeck, D. Cruickshank, L. King, T. D. Ralli, and J. Stevenson. The four last named gentlemen are now in Europe, and by a new election the Committee now are Messrs. J. J. J. Keswick (President), W. Bleeck (Vice-President), C. S. Hoare, J. M. Ziffo,

C. Clemm, and W. H. McKewan. Mr. E. E. Bigge having since become a member of the Committee by invitation, your confirmation of his appointment is invited. You will be glad to notice that two firms have been added to our list of members; I regret that the number is not greater.

Mr. Wood went on leave from August to December 1883, during which time Mr. John Cowie acted for him to the satisfaction of the Committee.

This Chamber is now in its fifty-first year. I notice from an old record, which Mr. Wood has handed me, that its first meeting was held on the 16th of April, and its second on the 3rd of June, 1834, and its first annual meeting on the 18th of April 1835.

I now propose that the report be received and adopted.

Mr. W. J. M. McCaw seconded the motion, which was put and carried unanimously.

The Chairman said he had next to propose that the conditional election, by the Committee, of Messrs. Browne and Lovelock, and Messrs. Hurry Dass Dutt and Co., as members of the Chamber, be confirmed.

The proposal was seconded by Mr. C. Clemm, and carried.

The Chairman next proposed that the election by the Committee, of Mr. Edward E. Bigge as a member of the Committee be approved of and confirmed.

The proposal was seconded by Mr. H. W. Uloth, Superintendent of the Peninsular and Oriental Steam Company, and carried.

The meeting was brought to a close with a vote of thanks to the Chairman.

H. W. I. WOOD,

Secretary.

BENGAL CHAMBER OF COMMERCE.

Report of the Committee from 1st May to 31st December 1883.

THE Committee submit their Report on the principal subjects which have had their attention during the past 8 months.

BENGAL AND NAGPORE RAILWAY.

THE Committee of the Chamber have steadily kept before them the importance of extending railways in India, and have advocated a return to a system of Government guarantee without which they are satisfied that sufficient capital cannot be raised to make such progress with railways as the country requires, and they are happy to say that the subject of railway extension in India is at the present time receiving much attention both at home, where a Parliamentary Committee is now sitting, and here.

Among the first new lines required is one to connect the Central Provinces with Calcutta, and

the Committee of the Chamber have considered it of the utmost importance, before Government fixes the route which this line shall take, to have the *pros* and *cons* of each that has been proposed carefully weighed. A report by Mr. Spring submitted by the Government to the Chamber in reply to the latter's letter, dated 2nd May 1883, forwarding papers from Mr. Prestage in favor of the direct route, will be found herewith, printed in full, and will no doubt be read with much interest. The Committee have felt that while great prominence has been given to items of heavy outlay which would be saved by adopting the Sitarampore route in preference to the direct one, the advantages of the latter (which is 71 miles shorter than the other), in saving time, rolling-stock, wear-and-tear, haulage, &c., have not had sufficient consideration. They think that all admit that the direct route is desirable, and should be adopted if it can be shown that it will give a fair return on the capital required to open it, and enquiries should have been made to see what return could be expected.

The Central Provinces Railway will develop an immense area of country, and the Committee consider it of importance to the mercantile community that it should have an independent

entry into Calcutta. The East Indian Railway Company's management of its own traffic in the past has been anything but good; and in the year just closed it has failed in its attempt to carry the traffic of the Oude and Rohilkhund line. It is against the interests of trade to have all the traffic on the West of the Hooghly monopolised by the East Indian Railway Company. Experience has proved that railways having independent entries into capitals create enormous traffic, and in addressing Government the Committee of the Chamber had this in view, as well as the fact that no single railway can suffice to provide for an extent of country from Cawnpore on the North-West and the Mahanuddy Valley on the South-West.

From Chamber to Government of India.

Calcutta, 2nd May 1883.

I AM directed by the Committee of the Chamber of Commerce to forward, for the information of the Government of India, the accompanying papers, received from Mr. Franklin Prestage, C. E., Agent, Eastern Bengal Railway Company, relative to the construction of a railway from Howrah to the Central Provinces *viâ* Midnapore and Chyebassa.

The papers referred to contain a mass of interesting information, and the Committee are glad to forward them; and at the same time to earnestly beg that early and attentive consideration may be given to the general scheme of communication with Central India. The Committee are not, however, prepared to endorse all the recommendations made by Mr. Prestage, and they take exception to the proposal that the line in question shall be of the metre gauge.

The Committee having been already in communication with the Government on this subject, they desire me to place before you the following extract from their letter of the 9th March 1882, and

in the sense of the remarks therein submitted the Committee again express their hope that the Government will come to such a conclusion as will secure for the Port of Calcutta the great advantages that are to be derived from the agricultural and mineral resources of the districts which the proposed railway communication cannot fail to command.

"The Committee desire to add, that they are by no means wedded to the idea of running the line through Midnapore, although their correspondence with that district does not confirm the Lieutenant-Governor's view that such a line would pass through an unproductive country from which no local traffic can be expected. Nor is the information which they have, from engineers of distinction, such as would lead them to anticipate that this route would prove comparatively a very costly one.

"What the Committee have principally set before themselves is the necessity to Calcutta of obtaining access to the Hinger Coal field, and to that rich district of which Bilaspur and Raipur are approximately centres, and which has been termed the granary of India. Their main object is to reach these points in the cheapest manner consistent with efficient working and by as direct a line as may prudently be feasible, and they are well content to leave the choice of the exact route to Government."

From F. PRESTAGE, ESQ., *Calcutta, to the Secretary of the Bengal Chamber of Commerce, dated Calcutta, 27th March* 1883.

SIR,

As I have had, on many occasions, the pleasure of discussing with your past Presidents and Committees the project alluded to in the enclosed papers, allow me to ask you to lay the case before the Committee in its now more complete form.

2. The Chamber has so consistently advocated the construction of the direct line, that I venture to hope it will continue to do so, and I trust I may now submit the following special reasons why I hope it will be thought that the project should receive the Chamber's special support :—

First—It promises to be the easiest and most prompt means of considerably increasing the exports from Calcutta, and of permanently securing to this country, and to this Port in particular, a very much larger share of the wheat trade.

Second—The work should be undertaken in order to complete, in a most thorough manner, the most important uncompleted main line of railway in India.

Third—Investigation goes to prove that it would be one of the most remunerative railways in the country.

Fourth—It is of the utmost importance that capital should be attracted to, and invested in, remunerative undertakings.

Fifth—The undertaking would not, there is reason to believe, require any financial aid from Government beyond the formal promise of the proposed guarantee.

Sixth—By the terms of the proposed contract, there is reasonable hope that the whole of the Province would in time be well served with railways from the surplus profits earned by the main line.

Seventh—The conditions by which food-grains would be carried at special rates during times of *scarcity* would tend to prevent *famines*, and help the State at a time when its revenues would be severely strained, without showing loss to the Railway Company.

Eighth—Instead of putting the whole of the trade of the South-west, West and North-west (as the advocates of the Loop propose) into the hands of one powerful Administration (the E. I. Railway Company), and by which it could control supplies and rates, a young and powerful Administration would be formed as a competitor with many advantages.

3. Parliament has recognised the need of competition in such cases, and in the interest of commerce has given the four principal and competing railways running powers between London and Manchester, *viz.*, the London and North-Western, the Midland, the Great Northern and the G. W. Railways.

4. I would beg attention to my letter of the 6th instant to the Joint-Secretary to the Government of Bengal, P. W. D., wherein I point out that by constructing Wet Docks in the Port, and thus removing the deep draft ships from the tide-way, we may hope for improvement in the condition of the channels of the Hooghly: and I should also bring to notice that the construction of such Wet Docks will, in no way, prejudice the construction of a Ship Canal to the Mutlah, which proposal was well considered by Colonel Rundell and myself with the aid of Sir Arthur Cotton in 1866 (*see* the records of the Chamber), but there is the greatest hope that by removing the deep draft ships from the tide-way, and discontinuing the erection of Jetties and such obstructions (which without doubt have caused heavy accretions to both banks of the river, as many predicted they would), the channels of the river will deepen and improve.

5. Under any circumstances, now that it is, I understand, agreed that Wet Docks should be constructed in order to give more space, greater facilities, save time and generally reduce the cost of all shipping operations. I would urge that the outlay on such works is further justified in the hope that they will also tend to permanently improve the channels of the Hooghly.

6. I would also beg to observe, as I hope also to impress upon the Joint Committee now about to sit to consider the question of Wet Docks, &c., that, in judging of these matters, we should prominently keep before us the probable future requirements of the Port, and if we do this we should look forward to providing for 5,000 tons of exports per day from the E. I. Railway, and without doubt the same quantity from the Central Provinces Railway, making in all 10,000 tons per day (in Bombay the exports have reached 11,200 tons per day from the Wet Docks).

7. Judging from the Government of India's letter No. 110 of the 20th instant, there is reason to hope that this important trade will not be burdened by the needless charges of hauling

it by railway to Diamond Harbour, and, as a member of the Chamber, I would beg to urge that it should not be burdened by the needless charge of hauling it from the West bank of the Hooghly to the East, but that it should be shipped from the nearest point in the Port, where the railways can be brought alongside the ocean-going vessels, in some such manner as that proposed in paras. 20 and 21 of my Note on the comparative merits of the routes proposed for the Central Provinces Railway.

I have the honor to be,
Sir,
Your most obedient servant,
F. PRESTAGE.

From F. PRESTAGE, ESQ., *to Chamber.*

Dated Calcutta, 2nd May 1883.

In continuation of mine of the 27th March last, although I hope that it will now be thought that the cost of bridging the Damoodah, Roopnarain and Cossye Rivers should in no way influence a decision in favor of the Loop Line, particularly when it is remembered that the saving in outlay in rolling-stock only by the direct line amounts to Rs. 1,08,96,000, say nothing of the great and constant saving in cost of working. / Yet to set at rest the cost of bridging the rivers in question, I have again had sections taken of them at the proposed crossings, and have obtained tenders from responsible contractors (Messrs. Marillier and Edwards) for executing the necessary works. An Abstract of the cost of which is—

Bridging the Damoodah	4 Spans of 108 ft.	=432 ft.				
Do. do. Cossye	6 „	„ 648				
		1,080	Rs. 800	per ft. run	8,64,000	
Roopnarain	11 „	„ 1,188	@ „ =947	„	11,25,036	
					Rs. 19,89,036	

This includes contractors' profits; so there is ample margin if the work was done as it should be departmentally.

If the most recent design for such bridges advised by Mr. Rundell, the Consulting Engineer of the East Indian Railway, was adopted (the same as on the Bengal Central Railway), the cost of bridging Damoodah and Cossye would be reduced to Rs. 504 per foot run, but rapid construction would be of such importance, that we advise the class of structure Messrs. Marillier and Edwards have tendered for.

Investigation has shown that the line coloured red on the accompanying plan is that which would be most direct (of paramount importance) and give the easiest crossings of the rivers.

The line selected is much more to the West and further up the

rivers, and therefore more free of tidal influence than the advocate of the Loop could have contemplated.

From Government of India to Chamber.

No. 729 *R.C., Simla, August* 17*th,* 1883.

With reference to your letter, dated the 2nd May last, and to your previous communications specified marginally, I am desired to request that you will communicate to the Committee of the Chamber of Commerce the assurance that the question of railway communication between the Central Provinces and Bengal, and of the best route which such communication should follow, has for long past engaged the earnest attention of the Government of India.

Dated 29th Nov. 1881.
„ 9th March 1882.

2. This question, indeed, is of very old standing. As long ago as 1868, when railway extensions in Bengal were under consideration, a preliminary investigation took place. Mr. Leonard, C.E., Superintending Engineer, South Eastern Circle, and Mr. Vernon Schalch concurred in preferring the Barrakur to the Midnapur route on account of "the enormously heavy water-way required" on the latter, and Mr. T. E. Ravenshaw, the Commissioner of Cuttack, pointed out the "enormous cost" which it would involve.

3. Passing over the intervening period, during which the Midnapur District was thoroughly examined and surveyed, in connection with the canals and protective embankments which have been constructed, I am to mention that the Government of India when instructing the Government of Bengal, in August 1881, to cause the three lines which had been suggested for connecting Barrakur and Bilaspur to be surveyed, added that—

"The Government of India, in considering the question of the direction of these lines, has preferred the northern lines to any running from Calcutta and Midnapur *viâ* Cuttack, because, the railways being undertaken to a great extent for famine protective purposes, it seems that the coast system of canals will partially protect this latter country, while it will be easy in the future to make a junction of the northern line from some point north of the Mahanadi river with Cuttack, should such a measure prove eventually desirable."

4. In consequence, however, of a desire that the line from the Central Provinces should pass from the neighbourhood of Chyebassa direct to Calcutta, rather than *viâ* Barrakur or Sitarampur, being still entertained in some quarters, orders were issued to the Engineer-in-Chief, Nagpur Railway Surveys, that in addition to locating the line from Sitarampur *viâ* Dugni and Raigarh to Bilaspur, provision should be made for a careful reconnaissance from Dugni *viâ* Midnapur to Howrah during the past cold season.

5. I am now desired to forward to you, for the information of the Chamber, the report of this reconnaissance, together with the comments of the Bengal Government thereon, and certain other information of importance in connection with the proposed line.

1. Letter from the Bengal Government, No. 2948R., dated 28th July 1883.
Mr. Spring's report and estimate for the route from Dugni to Howrah. dated 17th July 1883.
Note by the Chief Engineer thereon, dated 28th July 1883.
Mr. Parker's abstract estimate of the probable cost of a broad gauge railway from Sitarampore to Bilaspore.
2. Report by Mr. H. H. Risley, Deputy Commissioner of Manbhoom, on the trade of Chota Nagpur, No. 409R, dated 7th May 1883.
3. Report by J. B. Fuller, Esq., Director of Agriculture, Central Provinces, on the trade and trade resources of Chhattisgarh, No. 240, dated 11th July 1883.

6. From these documents the following comparisons may be obtained :—

	Miles.	Miles.
Distance—		
Howrah to Sitarampore by East Indian Railway	138	
Sitarampore to Dugni	95	
		233
Howrah to Dugni, *vid* Midnapore		162
Difference of distance in favour of Midnapore route ...		71
New line required—		
Howrah to Dugni, *vid* Midnapore		162
Sitarampore to Dugni		95
Difference, less construction, in favour of Sitarampore route		67

	Rs.
New Capital required—	
Howrah to Dugni *vid* Midnapore ...	2,08,16,187
Sitarampore to Dugni	80,14,942
Excess by adoption of Midnapore route ...	1,28,01,245

In addition, however, to the new line, if taken *via* Midnapore, being weighted by the necessity of raising and rendering remunerative 128 lakhs of additional capital, there can be no doubt that the expenses of working would be seriously enhanced by the absence of the cheap coal obtainable at Sitarampore, and the maintenance of the bridges and embankments in so difficult a country as that between Midnapore and Howrah. That country is intersected by canals and formidable rivers. The locality receives, moreover, the flood waters of a very large tract of country to the north, and is at times under water for miles. The flood especially passes between the Roopnarayen and Damooda, where even spring tides go 2 feet above the level of the country. These rivers are both tidal and navigable, and the former is very large.

The bridges and flood openings between Midnapore and Howrah will cost 65 lakhs of rupees in construction, and much in maintenance, and will be permanently subject to danger from floods, and even cyclonic waves, such as that which in 1874 flooded the station of Midnapore. Possibly some of these objections might be partly met by taking the line more to the north ; but this would involve an increase of distance without materially reducing the estimate.

7. As regards traffic, the section of the Midnapore route from that place to Dugni is very inferior in population and resources to the Sitarampore route, while the remainder is already well served by canals, on which steamers as well as boats can ply—conveyances, it may be observed, which might be formidable competitors of the Railway. The contrast between the two is truly and effectively drawn in the 82nd paragraph of Mr. Risley's note. While considerations regarding local traffic are thus in favor of the Sitarampore route, those regarding through traffic shew no balance in favor of its rival. Passengers and goods would indeed gain somewhat in time in reaching Calcutta, but they would arrive at Howrah on the west side of the Hooghly, instead of coming straight into Calcutta itself, over the bridge now under construction. But in cost it is probable that neither passengers nor goods would be gainers. The rates by the direct rout would have to be calculated to cover interest on the extra 128 lakhs of rupees of capital, while the rates by the Sitarampore route would only bear interest on a share of the capital spent on the section of the East Indian Railway between Sitarampore and Calcutta, which would certainly amount to much less than the above difference. The working expenses also, would, for the reasons already given, be higher, mile for mile, than on the Sitarampore line. It may be assumed, therefore, that no reduction in through rates would be likely to result from the reduction in distance, and that a ton of wheat from the Central Provinces could be carried as cheaply by the Sitarampore route as by the Midnapore.

8. It has been supposed in some quarters that the difficulties which the East Indian Railway has lately experienced in meeting the export trade were proof of the necessityfor either two additional lines of rails, or a separate railway, in order to meet the extra traffic which the Nagpore Railway would bring to Calcutta. But those difficulties have arisen, not from inability in the East Indian Railway to carry, but from inability to discharge at Howrah with sufficient rapidity. With additional stock and shorter intervals between trains, which will of course be provided as required, a double broad gauge line can convey a far larger traffic than this Railway has ever been called upon to meet. It is very possible that at some future date, when the trade of the Upper Provinces and Chota Nagpore has attained a far larger development, a line from Dugni to Howrah or Hooghly may be found profitable, but at present there appears no ground for preferring it to the substantial advantages of the Sitarampore route.

9. Such being the conclusions irresistibly arrived at on the

facts presented, it does not seem necessary to notice at any great, length Mr. Prestage's proposals accompanying your letter. I am however, to offer the following brief remarks on a few points:—

(*a*) Mr. Prestage's estimate of the cost of constructing the direct line is evidently much too low. It should be increased by 20 to 25 per cent.

(*b*) There are strong reasons for preferring the Calcutta side of the river to the Howrah side for Wet Docks.

(*c*) The estimate of 5,000 tons of wheat per diem obtainable from the Central Provinces appears very questionable;

(*d*) The prime cost of wheat must be the same wherever it is shipped from. It cannot vary in the proportion of 22·32 to 6·2, as stated in parapraph 3 of the Note of the 9th March;

(*e*) The supposition that after the opening of a through line the Great Indian Peninsula Railway would maintain their present rates for wheat, and consequently allow Sheogaon, only 340 miles from Bombay and 832 miles from Calcutta to be the point from which the traffic would divide, is altogether inadmissible;

(*f*) The assumption that it would take two additional broad gauge lines from Sitarampore to Calcutta to convey the traffic brought to the former by a double metre gauge line is unintelligible. Moreover, if two extra lines will, as stated in paragraph 18 of the same Note, be required for the traffic below Patna, it is evidently wrong to debit them in paragraph 26 to the Sitarampore project;

(*g*) If there be a likelihood of any such traffic as Mr. Prestage assumes, it is obvious that the broad gauge would be preferable to the metre. Metre gauge stock of such a nature that the paying hauled load per train shall be fully equal to that on the broad gauge, which Mr. Prestage is understood to contemplate, is at least beyond present experience. There is, however, every reasonable probability of traffic sufficient to warrant a line on the latter gauge, which is the more necessary in that the connection at either end will be with broad gauge lines;

(*h*) The reason for debiting the Sitarampore project in paragraph 26 with the whole cost of the bridge at Hooghly and of Docks at Diamond Harbour (or elsewhere on the east of the river,) and with two-thirds of the cost of a central passenger and goods station at Calcutta is not apparent, seeing that these are in course of being provided independently of it.

(*i*) The concessions and conditions proposed in the memorandum No. 2 do not appear likely to commend themselves to the money market, neither are they such as the Government of India could entertain.

The above remarks are not intended to be in any way exhaustive, but merely to indicate some of the principal preliminary objections to Mr. Prestage's proposals.

From the Secretary to the Government of Bengal, Public Works Department, to the Secretary to the Government of India, Public Works Department,— No. 2948R., dated the 28th July 1883.

I am directed to forward copy of a report by Mr. Spring, Executive Engineer, Nagpore Railway Surveys, with a map and estimates of the probable cost of the direct line of railway, 162 miles, from Howrah to Dugni, a point near Chyebassa, on the line from Sitarampore to Bilaspore, which was surveyed and located last season by the officers under Mr. Parker's orders.

2. The estimates framed by Mr. Spring have been examined by the Chief Engineer, who has an intimate knowledge of the country between Howrah and Midnapore, traversed by the three great rivers—Damoodah, Roopnarain, and Cossye. His note and a revised abstract estimate is herewith sent. The cost of bridging these rivers and the spill therefrom will be Rs. 65,10,000, instead of Rs. 87,46,000 as estimated by Mr. Spring. The Chief Engineer has included a sum of 10 lakhs of rupees for terminal buildings at Howrah, for which a quite insufficient allowance had been made; other differences are due to alterations in establishment and contingent charges.

3. The estimate for the line from Howrah to Dugni, 162 miles, *viâ* Midnapore, as revised by the Chief Engineer, is Rs. 2,18,16,187, while the cost of the line from Sitarampore to Dugni, 95 miles, is Rs. 80,14,942, showing an excess of capital required for construction, if the direct line be adopted, of Rs. 1,38,01,245.

4. There would, however, be a saving of distance by the direct line of 71 miles as follows :—

	Miles.
Howrah to Sitarampore, East Indian Railway ...	138
Sitarampore to Dugni	95
	233
Howrah to Dugni *viâ* Midnapore	162
Difference	71

The longer line would, on the other hand, have the advantage of cheap coal, procurable at Sitarampore and elsewhere, which would materially assist in keeping down working expenses.

Time would also be saved in the construction of 95 miles through easy country as against 162 miles through the heavily flooded tract of the direct line in which also two exceptionally large tidal rivers have to be crossed by bridges with very deep foundations in bad soil.

5. Mr. Parker's estimate of the line from Sitarampore is also forwarded herewith. It has been prepared in detail from the sections and surveys of the finally located line, and may be relied on. The total cost is Rs. 2,98,96,970 for 365¼ miles. It is from this estimate that the cost of the 95 miles from Sitarampore to Dugni has been taken in abstract estimate, which accompanies the Chief Engineer's note.

6. Apart from the considerations above alluded to (1), less outlay of capital, and (2) more rapid completion of the railway, the Lieutenant-Governor has already on other grounds * advocated the construction of the line from Sitarampore, *vid* Purulia, in preference to that direct from Howrah *vid* Midnapore. The former has no tidal rivers to cross, would have about 67 miles less of railway to construct, and will open up a tract of country at present but ill-provided with means of cheap carriage, and as a protective measure will be of great importance. The Midnapore District, on the other hand, is well protected by the Midnapore canal, which last year carried 3,29,000 passengers and 1,38,000 tons of goods by steamers and boats, besides irrigating 1,00,000 acres of land. Beyond Midnapore to Chyebassa, the country is mountainous and difficult, very sparsely populated at present, and with none of the advantages for traffic which the route *vid* Sitarampore to Bilaspore promises to develop. In this, too, the supply of coal and of iron and steel from the Bengal Iron Works, now temporarily under Government management, gives large prospective advantages, and it may be accepted that, with the cheapness of coal and of labour, the working expenses of this line would be much less than the 50 per cent ordinarily calculated upon the gross earnings. The Government of India has already received a copy of Mr. Risley's report on the trade of Chota Nagpore as affecting the interests of the proposed railway from Sitarampore to the Central Provinces, and though in dealing with a primitive tract of country the extent of the existing trade may not be very large, the prospect, especially from the development of its mineral resources, is full of encouragement. It has been estimated that the line would return a profit of about 4 per cent upon the capital outlay. The Lieutenant-Governor desires me to express the hope that early orders may now issue for the commencement of this line.

* Letter No. 461T.R. of 22nd May 1883.

Note by the Chief Engineer on Mr. Spring's report and estimate for the alternative route for the Bengal-Nagpore Railway. Direct line from Howrah to Dugni (Chyebassa).

Mr. Spring estimates the cost of this line at Rs. 2,32,38,000, but he has fallen into error regarding the discharges of the rivers Cossye, Roopnarain and Damoodah, which are as follows:—

	Cubic feet per second.
Cossye above Midnapore	=1,80,000
Roopnarain	=3,90,000 *
Damooda	=3,50,000

The Cossye at Panchkorah can only carry 30,000 cubic feet per second, the difference, *viz.*, 1,50,000 cubic feet per second, is thrown off mostly at the Pilaspai (mile 380). Mr. Spring allows for the waterway of the Cossye above Midnapore, only 800 feet of bridging, which is inadequate to carry 1,80,000 cubic feet per second; at least 1,200 must be given at Pilaspai; he has allowed

300 lineal feet in the estimate for major bridging, and about 400 in the minor bridge estimate; this is also inadequate.

In order to pass the 1,50,000 cubic feet which spills over the country in the neighbourhood of the Pilaspai Khall, at least 3,000 feet of flood opening must be allowed. The estimate must therefore be increased by the cost of 2,600 lineal feet of minor bridging.

At the Roopnarain it will be impossible to obtain a width of 5,500 feet as allowed in Mr. Spring's estimate; not more than 2,000 feet can be got, and the estimate for this bridge will be very greatly reduced.

At the Damoodah I would allow a width of 1,500 feet which can be got. Mr. Spring has taken the width at 1,250 feet. These two bridges will carry 3,75,000 † cubic feet per second, but the flood discharge is 7,40,000, the difference 3,65,000 must therefore be provided for constructing additional flood openings. For this purpose 7,300 ‡ lineal feet will be necessary, to which must be added 2,100 lineal feet for local drainage, &c., making in all 9,400 feet in place of 14,100 allowed by Mr. Spring from mile 402 to mile 432.

	Length.	Velocity discharge.
† Roopnarain ...	2,000 × 20 × 6	= 2,40,000
Damoodah ...	1,500 × 15 × 6	= 1,35,000
Total ...		3,75,000

‡ 7,300 × 10 × 5 = 3,65,000.

Comparison of the estimates will stand as follows :—

Major Bridging.

Locality.	Chief Engineer			Mr. Spring.			Difference.
	Lineal feet of waterway.	Rate.	Cost.	Lineal feet of waterway.	Rate.	Cost.	
		Rs.	Rs.		Rs.	Rs.	
Cossye, m. 351	1,200	450	5,40,000	800	440	3,52,000	+1,88,000
Roopnarain	2,000	600	12,00,000	5,500	600	33,00,000	—21,00,000
Damoodah	1,500	600	9,00,000	1,250	600	7,50,000	+1,50,000
			26 40,000			44.02,000	—17,62,000

* Darkeporo 1.50,000
Silye 90,000
Spill from Cossye 1.50,000
Total ... 3,90,000

Minor Bridging.

Locality.	Chief Engineer.			Mr. Spring.			Difference.
	Lineal feet of waterway.	Rate.	Cost.	Lineal feet of waterway.	Rate.	Cost.	
		Rs.	Rs.		Rs.	Rs.	
Mile 375—385	3,000	350	10,50,000	400	...	1,14,000	+9,36,000
„ 402—432	9,400	300	28,20,000	14,100	...	42.30,000	—14,10,000
			38,70,000			43,44,000	—4,74,000

There will, therefore, be a reduction in the cost of major bridging of 17,62,000, and of minor bridges of 4,74,000, making the total difference 22,36,000. No sufficient allowance has been made in Mr. Spring's estimate for terminal works at Howrah. Even if a portion of the East Indian Railway buildings are utilized for that purpose, they will have to be paid for. I think at least 10 lakhs must be added on this account.

The estimate will thus stand at Rs. 12,36,000 less than Mr. Spring's estimate, or at a total of Rs. 2,20,02,000.

Calcutta ; *The 28th July* 1883. } (Sd.) H. C. LEVINGE, *Chief Engineer.*

From W. H. Parker, Esq., M.I.C.E., *Engineer-in-Chief, Bengal and Nagpur Railway, to the Secretary to the Government of Bengal, Public Works Department,—No. 767, dated 3rd July* 1883.

I have the honor to forward abstract estimate of the probable cost of the Bengal and Nagpur Railway, from Sitarampur to Bilaspur, as called for in your No. 434 T. R. of 18th May 1883.

2. The estimate amounts to Rs. 2,98,96,970 for a length of 365¼ miles. The estimate framed from Mr. Ramsay's sections, and submitted with this office No. 848 of 9th September 1882, was for 367 miles Rs. 2,97,03,121, including land, but no "workshops," which in the estimate now submitted amounts to Rs. 1,82,625.

3. The total quantities in earthwork exceed the first estimate by 99 lakhs of cubic feet, value Rs. 54,450. A further excess of Rs. 8,12,042 is due to increase of rates, owing to their being more rock in cuttings than originally anticipated, and to the quantities in high embankments being also greater than estimated. For ordinary banks Rs 4 per 1,000 cubic feet has been estimated, instead of Rs.

3, which is considered rather a low rate. In the third division a tunnel, which it was hoped might be avoided, has been found indispensable at Derva in the Suranda. This tunnel has been estimated for a double line, and is 2,300 feet in length, costing Rs. 4,10,000.

4. As regards actual quantities, there is a decrease of 26,828,422 cubic feet in cuttings, and an increase of 36,749,183 in cubic feet banks. As regards the old estimate, the quantities given are final quantities calculated from the working sections.

5. In bridge-work the estimate now submitted is Rs. 4,89,917 less than the rough estimate, as some of the larger bridges, such as the Damuda, Cossye, Subarnarikha, are found to require less waterway than originally calculated. Each culvert and minor bridge has been estimated, but the important bridges are taken out only at a fixed rate per running foot.

6. There is an increase in the item of ballast, as the former estimate did not provide 10 per cent. for stations. This has been added and increases the cost per mile from Rs. 3,300 to Rs. 3,790 per mile, and the total cost of this item from Rs. 12,11,100 to Rs. 13,84,298.

7. There is a decrease of Rs. 10,63,228 in permanent-way, owing to rate for sleepers being decreased from Rs. 3 to Rs. 1-12, and to more careful calculation of the cost of lead of rails and fastenings to works. The rates for cost of permanent-way at Calcutta are taken as in the rough estimate, but it is calculated that sleepers can be easily obtained at the reduced rate owing to the proximity of the forests.

8. Stations and buildings are increased by Rs. 2,63,099, the number of stations being slightly increased beyond what was originally intended to bring them to a distance of some 12½ miles apart instead of 15 miles, and rough estimate of cost of each building required is given.

9. Workshops and stores were omitted from original estimate, as it was understood that the line would be worked by the East Indian Railway. On reconsideration of the matter, it has been thought best to allow a small sum per mile, Rs. 500, which gives Rs. 1,82,625 as the cost of any district workshops or stores that may be required.

10. The other items of the estimate are affected only by the length of line, rates remaining the same, except in the item "Preliminary," where the rate has been reduced from Rs. 1,500 per mile to Rs. 1,000, as the estimate for survey and reconnaissance amounts only to Rs. 700 per mile, leaving Rs. 300 per mile available for any future operation that may be found requisite.

11. A comparative statement is attached, showing in detail the comparative cost of estimate now submitted with the rough estimate, the cost per mile being Rs. 81,583, or 0·8 per cent. more than the last rough estimate, which amounted to Rs. 80,935, including land.

From FRANCIS J. E. SPRING, ESQ., *Executive Engineer, to the Engineer-in-Chief, Bengal-Nagpur Railway Surveys,—Hazaribagh the 17th July* 1883.

SIR,

I have the honour to submit a report upon the Calcutta-Midnapur-Chaibassa alternative of the Bengal-Nagpur Railway.

Submit report.

In compliance with your instructions, I made a reconnaissance of the route from the junction with the Bilaspur-Sitarampur Survey to Midnapur, making aneroid observations for levels, and measuring waterways. Sufficient information was available from the Canal Department about the remainder of the route, between Midnapur and Howrah, for the purpose of this report, to render further reconnaissance unnecessary.

Route reconnoitered.

Nothing has hitherto been known of the Chaibassa-Midnapur portion of the route. The Midnapur-Calcutta portion is thoroughly well known, and has been levelled over in every direction. No surveys have, it is believed, hitherto been made for crossings for the Damuda and Roopnarain rivers at this portion of their course, but I have now got sections of these rivers as well as of the Kassai from the Executive Engineer, Kassai Division, Midnapur.

Information hitherto available.

Leaving the Bilaspur-Sitarampur route at the 270th mile from Bilaspur, the general direction of the route to be now reported on is as follows:—

General direction.

Running eastward till the 277th mile, the line bends to the south-east, till the *Korkai river*, an important branch of the Sabarnarikha, is crossed at the 284½″ mile near the villages of *Dindli* and *Jagsoli*. The general direction of the route is now south-east, and the village of *Domjori* having been passed on the north side, the Sabarnarikha river is crossed at mile 299½″ near the village *Chondorekha*. The line then passes close to *Moholia*, and about a mile north-east of *Ghatsilla*, whence, turning southward, it passes about a mile north-east of *Narsingarh*; then north of *Pira Hill* to *Ckakulia*. At the 327th mile the Midnapur District is entered, and the route is tolerably straight, and eastward, through *Jambandi*, where at mile 336 the *Dholang Nulla*, a large branch of the Sabarnarikha, is crossed. From Jambandi the line goes east to Midnapur, crossing the *Kassai* at mile 351, and reaching *Midnapur* at mile 365. Passing Midnapur close on the north side, the line bends a few degrees to the northward, so as to avoid a great bend of the Kassai. The *Pulaspaikhal*, a broad spill that runs into the Kassai, is crossed at mile 380; thence running a few degrees south, a large nulla or khal, the *Durbachata*, is avoided, and passed at the 394th mile. At mile 402 the *Roopnarain* river is reached, and crossed at a point where it is narrowest, about three miles above *Kola Ghat*, where the Calcutta-Midnapur road crosses. The *Damuda river* is crossed

at mile 406 at a narrow place, about 3 miles up stream from *Mohishrakā Ghat*, where the road crosses. Thence the line turns a few degrees northward, and crossing round outside *Howrah*, enters the terminus and ends at the 432nd mile from Bilaspur.

The four miles to the inch map showing the route in a broad red line accompanies this report. A portion of the Bilaspur-Sitarampur route is also shown on the same map in a thick dotted line, and a possible alternative south of Midnapur, which possesses no special advantages beyond communication with the navigable canal, in a thin dotted line.

Detailed description of route.

I now proceed to give a detailed description of the result of the reconnaissance.

From mile 270, the junction with the Bilaspur-Sitarampur Survey to mile 284¼, the Korkai crossing, a large number of nullahs tributary to the Sanjai and Korkai are crossed; hence the country being very rough, it is impossible to follow anything like a contour. Owing to the frequency and depth of the nullas, the gradients will probably be rather up and down.

The average banks and cuttings on these 14¼ *miles* will be about 10 *feet*; the soil is all gravelly clay, and easy to work.

There will be the following bridges:—*Khori nulah*, at mile 270½, 30 *feet* bridge; *Murkum* nullah, mile 280, 40 *feet* bridge; besides 100 *feet of minor bridging*, and about 50 *feet of small culverts*.

Korkai Nullah.

At mile 284¼ the *Korkai river* is crossed. The bridge would require 450 *feet of waterway*, with piers 50 feet above bed, and 10 feet foundation in sand over rock. Rock sites for two piers, to support three 150 feet spans, would probably be found at surface on survey. The nullah runs in a deep valley, so that down and up grades will be necessary. The actual height of the banks is 40 feet, and they are of sandy clay.

Karkai to Sabarnarikha.

From mile 284¼, the Korkai crossing, to mile 299½, the Sabarnarikha, fewer nullahs are crossed than on the previous section, because the line is more or less on a level watershed for the greater portion of the distance. In the first three miles beyond the Korkai, there is an ascent of 150 feet on to the watershed opposite Kalimati village. This involves three miles of 1 in 100. The village of Domjori is passed at the 292nd mile. A considerable branch of the Sabarnarikha, the Gurrha, the valley of which is some thirty miles in length, runs between Domjori and the Sabarnarikha, parallel with the line, and about a mile off to the south. The earthwork on this portion will be 8 *miles* of 8 *feet bank*, and cuttings in clay; 3 *miles* of 5 *feet bank*, and cuttings in hard moorum and shales; and 4 *miles* of 5 *feet bank* in ordinary clay. The waterways will consist of about 60 *feet of minor bridging* and 50 feet of small culverts. There will be no difficulty about gradients; after once the ascent from the Korkai is accomplished, the gradients will be very flat.

The *Sabarnarikha river* is crossed at mile 299¼. It will require 600 *feet of waterway*,* that is, three spans of 200 feet resting on piers 60 feet high, on foundations sunk 20 feet in sand and resting on rock.

Sabarnarikha.

* Probably more. B. Nagpur takes 6×150 feet in 60 feet piers—W. H. P.

From the Sabarnarikha crossing to mile 315, Narsingarh, the line runs more or less parallel to the Sabarnarikha, and about two or three miles away from it. A large number of considerable nullahs are consequently crossed; and as the intermediate ridges are generally high, the work on this portion will be heavy, and the gradient will ascend and descend. The existing road between Chaibassa and Midnapur meets the line near the Sabarnarikha crossing, and gets on to a lot of high ground half way between Moholia and Ghatsilla, and then decends some 180 feet into the bed of the Bhatai nullah at Ghatsilla. This fall will be avoided by taking the line about a mile and a half on the north-east of Ghatsilla, but the ground is every where very rough. On this section of 15¾ miles, the earthwork will consist of Sabarnarikha to Moholia, 2¾ miles of 5 feet bank in clay; Moholia to Ghatsilla, 7 miles of 12 feet bank, cuttings through hard clay and moorum; Ghatsilla to the Chorsati N., 2 miles of 10 feet bank, and cuttings through quartz; *quartz ridges, shales, and laterite;* Khorsati N. to Narsingarh, 4 *miles of* 8 *feet bank* and cuttings in hard clay. The bridging on the section will consist of one 100 *feet bridge* over the *Khorsati*, one 80 *feet bridge* over the *Punsa*, one 70 *feet bridge* over the *Bhatai*, one 60 *feet bridge* over the Kondor, besides some 65 *feet of minor bridges* and 100 *feet of small culverts.*

Sabarnarikha N. to Narsingarh.

From Narsingarh, mile 315, to Chakulia, mile 325, the ground is considerably disturbed by a local hill called Pira.

Narsingarh to Chakulia.

The line passing on the north of Pira ascends a local watershed dividing a set of nullahs which flow into the Sabarnarikha from another set following east into the Dholang nullah, a tributary of the Sabarnarikha, to be crossed by the line further on. The general character of the country is high undulations separated by deep nullahs and ravines. The earthwork of this section will consist of 10 miles of 10 *feet bank and cuttings* in hard clay. The bridging will be one 50 feet bridge over the *Sindiri nullah*, and one 40 *feet* over the *Gandrupi nullah*, with 60 *feet of minor* bridging and 50 *feet of small culverts.* The gradients will, on account of the undulatory character of the ground, be a good deal up and down.

The next 10 mile section from Chakulia, mile 325, to Jambandi mile 335, is through a country whose formation consists, like the last, of high rolling downs. This is naturally very unfavourable for gradients; but as this section lies principally on a watershed, the waterways required will be trifling. The earthwork will be about 10 miles of 8 feet bank and cuttings in hard clay. The waterways will

Chakulia to Jambandi.

consist of about 100 feet of culverts. Most of this section is through dense-stunted sâl jungle.

Jambandi to the Kassai N.

From Jambandi, mile 335, to the Kassai river, mile 351, a distance of 16 miles, the line, after crossing the Dholong nullah, can be located so as to run more or less on a watershed. For the first 8 miles the earthwork will be 8 feet bank, and cuttings in hard clay, and for the last eight miles, 6 feet bank in ordinary clay. The Dholong nullah will be crossed at mile 335¾ by 200 feet of bridging, 30 feet above bed with 20 feet foundations in sand resting on clay. The remaining waterways on this section will be one 50 feet bridge over a nullah at the 348th mile, and about 250 feet of minor bridges and culverts.

Kassai N.

At the 351st mile the Kassai river is crossed by 800 feet of bridging, piers 35 feet high, foundations probably 60 feet in sand. A careful survey will be necessary to find the best crossing for the Kassai. I have put it at 4½ miles down stream from the Chaibassa-Midnapur road, crossing where 800 feet of waterways will be sufficient. The road crossing being unbridged was naturally selected for its breadth and consequent shallowness. It is there about 1,400 feet wide. But that 800 feet of waterway is not insufficient is proved by cross sections of two sites, 50 miles apart, one opposite Midnapur, and the other 50 miles further down stream, and both on the Bombay-Calcutta road. In the first the breadth at highest flood level is 750 feet, and the greatest depth 20 feet, and in the latter the highest flood breadth is 800 feet, and greatest depth 30 feet. These and other cross sections were given me by the Executive Engineer, Kassai Division.

Kassia N. to Midnapur.

From the Kassai river, mile 351, to Midnapur, mile 365, a length of 14 miles, the country is easy and level. The first five miles are in the Kassai valley and very level, but a good deal of local drainage into the Kassai is crossed. The latter 9 miles are on a tolerably level plateau, and almost on a watershed. As the general level of this high ground is some 60 to 80 feet above the Kassai valley, there will be an ascent at about the 356th mile. It would be possible to avoid this high ground by following generally the course of the Chaibassa-Midnapur road, and remaining down in the Kassai valley; but much more waterway would be required, and at one point near Midnapur, where the plateau projects into the river, there would be some heavy work. If it were any object to connect the railway with the navigation canal, the preferable site for the Midnapur station would be south of the town, and on the river bank, or, better still, the alignment from Jambandi should go south of the Kassai river, as shown by the thin dotted line; but if, as is more probable, the railway and canal would serve for entirely different purposes, the latter continuing to carry grain to the Hooghly from Midnapur, the best site for the station would be close to the north of Midnapur on the high ground. The average work on this section of 14 miles will be 5 miles of 6 feet

bank in ordinary clay; one mile of 10 feet bank and cuttings in hard clay and moorum; and 8 miles of 4 feet bank in clay. The bridging would be 200 feet of 10 to 20 feet bridging and 150 feet of small culverts.

General Remarks.

The previous paragraphs give all necessary information for a preliminary rough estimate for the 95 miles from the junction with the Bilaspur-Sitarampur Survey to Midnapur. An approximately correct aneroid section of the route can hereafter be given, but the observations have not as yet been worked out. There will, however, be no difficulty about getting over the ground with 1 in 100 as the ruling gradient. The first 70 miles of the country * can be very well compared with the portion of the Bilaspur-Sitarampur line between Rangadih and the Bamni river, except that the gradient will not be so continuously downwards.

Midnapur and Howrah.

With reference to the remaining 67 miles from Midnapur to Howrah, the only information I am able to give is what I could gather from the Collector and Executive Engineer at Midnapur. The gradients over this portion of the route will be practically level bheels and large areas of flooded country, and spills from large rivers, and the chances of the frequent bursting of any of the very numerous embankments will be the principal difficulties to be contended with. It will be impossible to calculate † and difficult to estimate the amount of water to be allowed for in these spills and floods. The flood opening question will probably be solved by the practical but expensive method of throwing up the bank and waiting to see to what extent and to what places it is breached. The net work of bunds which crosses the country in all directions will be a good criterion for the height of the bank.

Roopnarain and Damuda.

The Executive Engineer, Kassai Division, was good enough to get me sections of the Roopnarain and Damuda rivers where crossed by the Trunk Road. The width of flood level of both of these rivers is surprisingly small, but they are only kept from flowing over the whole country by the bunds along both banks which are kept up by the Public Works Department. The *ground level* near both these rivers is only 10 or 12 feet above mean sea level. In the case of the *Roopnarain*, the bunds which retain the floods *are* 8 *feet above the ground surface.* In the case of the Damuda, the *floods rise* 6 *feet over the ground surface* and are only *retained* by the *bunds* which are 10 *feet* above the ground.

Roopnarain.

The width between the embankments of the Roopnarain is 1,700 feet, but judging from other sections and calculations, which see further on, I should say that the river must be crossed by 5,500 feet of

* A very lumpy, undulating country, with rather long gradients of 1 in 100.—W. H. P.

† Rough calculation is given further on, based on observations taken by Bengal-Nagpur Railway higher up-country. —W. H. P.

bridging. The maximum height from deepest part of stream to top of embankment is 38 feet; allowing 12 feet more for country boats, the piers of a bridge would be 50 feet high. The foundations may be anything; 100 feet will probably not be considered an excessive estimate.

In the section of the Damuda, the width between embankment is 1,250 feet, and the maximum height from deepest part of stream to top of embankment is 20 feet. The height of piers would therefore be 40 feet. Foundations as in the Roopnarain probably 100 feet; 1,250 feet of waterway is required for the main channel.

Damuda.
This does not allow for the whole discharge of the Damuda.—W. H. P.

The cold weather depth of water in the Roopnarain at deepest is 20 feet, and in the Damuda 14 feet. A very careful survey of both rivers would, of course, be necessary before the crossing sites could be fixed. The two sections now available would probably be greatly improved upon, as they were not taken at selected points, but where the Trunk Road happened to cross. A site on both rivers, about three miles up stream from the road, would appear from the inch to the mile maps to be the best crossing. The height of tidal or cyclonic wave is an important matter so near the sea, but I presume that the Engineers who designed the embankments knew all about that.

Damuda and Roopnarain.

I do not think *an average of* 12 *feet* bank for the whole of this 67 *miles* an excessive estimate, because for many miles at a time, over the innudated areas, the banks will probably average 15 feet. The soil will be ordinary rice clay.

Banks between Midnapur-Howrah waterways.

The estimate I can make for the minor waterways will necessarily be very vague. From mile 365 to mile 375 there will probably be 200 *feet of bridging* 20 feet high, over large khals, and 300 *feet of minor* culverts. Between miles 375 *and* 385 there will be 300 *feet of bridging*, 30 *feet high*, over the *Pulaspai* nullah, and 400 *feet of minor* openings. From mile 335 *to* 395 I estimate *one* 100 *feet bridge*, 20 *feet high* over the *Toper khal*, and 400 *feet of minor* openings. From mile 395 to mile 402, say, 200 *feet of* culverts. Between the 402nd *and the* 406th miles are the *Roopnarain and Damuda* rivers. From the Damuda into Howrah, mile 432, the bridging would probably be as calculated in the following pages of notes upon the Roopnarain and Damuda spill waters. An elaborate survey for these waterways would of course be required, but a good idea of them can even now be formed.

Notes on the waterways required for the Roopnarain and the Damuda and their overflows.

The fall of the ground in the alluvial valley containing these two great rivers appears to be only some three or four inches per mile. It is therefore only what might have been expected that, running as they do parallel to each other, and only five to ten

Notes on the Roopnarain and Damuda.

miles apart, their flood waters should get mixed, and that they should overflow through beels and khals, and over the surface of the country, into each other, and into the Hooghly.

Without an extensive survey, it will be impossible to exactly fix the quantity or the location of the bridging required.

We possess, however, sufficient information to enable an Engineer to assert that nothing less than a certain number of lineal feet will suffice. We are bound to provide for the passing off, at no extraordinary velocity or depth, of the drainage of 12,350 *square miles of* country between mile 395, the *Kassai-Roopnarain* watershed, and *Howrah terminus,* mile 432. First to take the case of the Roopnarain, which presents no great difficulties. It drains an area of 3,300 *square miles*, which, using Colonel Dickens' formula, with so small a co-efficient as 750,* represents a discharge of 305,000 *cubic feet* per second. I have a section kindly procured for me by the Executive Engineer, Kassai Division, at a point about 8 miles up stream from the Trunk Road, crossing on which for a 17 feet flood there is a flood area of 41,873 *square feet.* This, with above discharge, would give a velocity of 7·28 feet per second. With so small a fall as 3 or 4 inches per mile, we can certainly allow of no greater velocity than this through the bridge. The breadth of the river at this site *is* 5,500 *feet* and the mean depth 7·6 feet. Of above flood area of 41,873 square feet, a large proportion, 16,543 square feet, represents water only 4 *feet deep* flowing over the surface of the ground between the edge of the main stream and the embankments. It would be impossible to throw this 16,543 square feet into the main stream without increasing the velocity to an extent quite inconsistent with the fall of the ground. Deducting this 4,136 feet of shallows, if we were to endeavour to throw the whole of the water through the remaining 1,364 lineal feet of main stream, we should get no very much greater depth, but a much greater velocity, some 11 to 12 feet per second, which could not be allowed over the alluvial silt. It therefore seems impossible to avoid a length of some 5,500 *feet of bridging*, and whether the whole of this or only half of it is built on deep well foundations will depend entirely upon what future borings tell us as to whether the actual river has been always within its present deep channel, or whether it has wandered about anywhere within the 5,500 feet, over which its flood now runs.

* 705? Co-efficient obtained from the discharge of Damuda near Sitarampur.—W. H. P.

Meanwhile it is safest to estimate for 5,500 feet of bridging with 100 feet well foundations and piers 50 feet high for the Roopnarain river.

We have another section of the Roopnarain at Koella Ghat, where the Trunk Road crosses, 8 miles below the section already considered; but this is not a representative section, because a large proportion of the flood water has made its way over the country before this place is reached.

We have now to consider the case of the Damuda, at a point some 140 miles up stream, just below its junction with its most important feeder, the Barrakur river; its discharge has been

thoroughly gone into for the Bilaspur-Sitarampur Survey. The area of country drained above this point is 7,030 *square* miles. The discharge due to this area, using the low co-efficient 705 with Colonel Dickens' formula, comes out 541,120 cubic feet per second. That this is correct is proved by it corresponding very nearly with the discharge calculated from the fall of bed at that point, and the known flood of 31 feet between defined banks. The bridge as designed at this point for the Bilaspur-Sitarampur Survey gives a waterway for a 31 feet flood of 55,800 square feet. At the site where the Midnapur alternative would cross the area of country drained by the Damuda is 9,050 *square miles*.

Co-efficient was worked out from discharge.—W. H. P.

The discharge calculated by the same formula is 654,240 cubic feet per second. In a section of the Damuda at the Trunk Road crossing the breadth between the embankments is only 1,250 feet, and the area of flood section 12,115 square feet. In another section, at a point 8 miles further up stream, the breadth between embankments is only 1,130 feet, and the flood area 8,954 feet. If we assume a velocity, the same was found at the Roopnarain of 7·28 feet, we get a discharge through *the main stream* of the Damuda of only 88,000 feet, or only about $\frac{1}{6}$th of what we know the discharge must be at this point, and only $\frac{1}{7}$th of what it is accurately known to be where crossed by the Bilaspur-Sitarampur Survey. The remainder of the discharge, or 566,000 *cubic feet*, must find its way through the line somewhere between mile 406 and Howrah. A great portion must find its way through khals and nullahs, which can be seen on the map, but the greatest portion must flow over large areas of country in the form of broad inundations. As the fall of the country is extremely small, we cannot assume a greater velocity for this flood than 5 feet per second; and if we assume that the water runs 12 feet deep in the khals and 6 feet deep over the country, we find that a length of bridging of some 4,700 *feet is required* over the *khals*, 9,400 *feet of minor* bridging culverts and flood openings, and in addition to this, 1,250 *feet of major bridging*, with 40 *feet piers over* 100 *feet* wells, would be required for the main channel.

I am not in a position to express an opinion of any value upon the question of the local trade. I can only say that from mile 270 to mile 327, the country may be described as a narrow valley covered with jungle, and having small patches of cultivation around the villages. The portion between miles 270 and 285 may be described as a sort of "devide" or "watershed" between the trade which centres on Purulia and that which centres on Midnapur. This section is then, as might be expected, destitute of roads. The Chaibassa-Midnapur road comes in at mile 285, but as far as the commencement of the Midnapur district, mile 327, it appears to serve no local necessity for traffic, as the villages are small and scattered through dense jungle. I met nowhere, so far, those dense herds of laden pack bullocks, or sudder carts to be met with over the Chota Nagpur roads.

Trade.

After the Midnapur district is entered, the country becomes more cultivated, and there is doubtless more grain grown than is consumed locally; still as far as mile 350, four-fifths of the country is covered with jungle. In his report on his suggested Gewankhali route, Mr. R. H. Wilson, Collector of Midnapur, mentions the traffic to be expected from the rich Bamunbati Valley in Morbhanj. It seems to me that this traffic will continue to find its way as at present from its centre, Baripada *viâ* Sirsa along the Bombay road, into Midnapur direct. Bengal producers consign to small local mahajuns, who in their turn consign to their correspondents in the great trade centres of the districts, and when once the mahajuns' caravans have been loaded up, it matters little to them whether they have to travel five marches or ten. A precisely similar case is that of Raniganj, which has long been a great trade centre and the residence of large mahajuns; a great trade from Chota Nagpur, which it might have been expected the railway at Barrakur, or at all events Sitarampur, would have tapped, is actually carted along the Trunk Road, passed Barrakur and Sitarampur, and parallel to the East Indian Railway to Raniganj.

This is not entirely due to custom; but, as the people have frequently told me, to a dislike to the delay and worry of breaking bulk, and waiting probably quite as many days at the railway station as they would have spent on the extra road marches. I can say nothing about the traffic between Midnapur and Calcutta, but it must be thoroughly well known by the Midnapur civil authorities.

This district as well as that of Hooghly must be very rich, and both appear to be densely populated east of the town of Midnapur.

Station.

The first place where the probability of traffic would suggest a station is Moholia at mile 302, where the Chaibassa road comes in; but as this is 30 miles from Sini station at the 270th mile of the Bilaspur-Sitarampur Survey, it will be necessary to have an intermediate station at Susindi, mile 287. It is scarcely probable that minor intermediate stations would pay in this jungle valley. Ghatsilla, at mile 308, is an important town with a thanna and post-office and a resident Rajah, but, as owing to the low level of the town the line must be taken a mile and a half to the north-east, Ghatsilla will be sufficiently served by Moholia station and the next, at mile 315, at Narsingarh. Although Chakulia, mile 325, is only 10 miles further on, it is the junction of several roads, and a station there would perhaps draw traffic. The next possible site would be Jambandi, mile 337. Then in the Kassai Valley, a station at mile 353, opposite Chandra the road stage, would be necessary. The country around here is very rich and much indigo is grown. Midnapur at mile 365 would require a second class station. From Midnapur into Howrah frequent small stations ought to pay.

The following sites would suggest themselves for third class stations, Kamalpur, mile 381, Jadupur, mile 395, Khanpur, mile 409, Sankrail ferry, mile 423. Probably another station at Mandara, mile 404, between the Roopnarain and the Damuda would be desirable.

From mile 270 to mile 350 the inter-village traffic is so paltry, that the bridges would very frequently be sufficient for the herds of cattle. A 3rd class level crossing in addition every four miles would probably be sufficient. From mile 350 to mile 380 a 3rd class crossing every two miles would be probably enough. From mile 380 to Howrah, mile 432, the high banks with frequent openings would give such facilities to traffic, that one-third class crossing every mile and a half would suffice, notwithstanding the greater density of the population. In addition to the above 70 3rd class crossings, it will be necessary to give second class crossings at the following places for the main district roads:—Mile 275, Chaibassa-Purulia road, mile 325, Chaibassa-Midnapur road, mile 355, Chaibassa-Midnapur road, mile 364½ at Midnapur station for the Bankura road, and mile 369 for the Burdwan and Midnapur road. That is five second class crossings.

Level crossing.

There is abundant material for cheap ballast from mile 270 to mile 370. From mile 370 to mile 432 ballast will have to be burnt, and as fuel is scarce it will be expensive.

Ballast.

Brick will probably be the best building material all along the line; there is no good building of stone anywhere. Lime and fuel are plentiful for 100 miles out of the 162.

Building materials.

Sâl timber suitable for sleepers is plentiful for the first 50 miles; it will be scarcer along the next 50, and whatever has been found the cheapest sleepers on the other railways around Calcutta will probably be used on the remaining 62 miles.

Sleepers.

The price will vary according to the distance from Calcutta. Temporary land has been put down in the estimate at half the price of permanent land.

Land.

Appended is an estimate founded upon this report. According to this, the cost of the 162 miles comes out as Rs. 2,32,38,000, or Rs. 1,43,444 per mile. The rates generally are the same as on the Bilaspur-Sitarampur Survey.

Estimate.

From J. B. FULLER, Esq., C. S., *Offg. Director of Agriculture, Central Provinces, to the Secy. to the Chief Commissioner, Central Provinces;—No.* 240, *dated Nagpur the* 11*th July* 1883.

SIR,

Referring to the Government of India letters marginally noted, I have the honor to submit the following report on the trade and trade resources of Chhattisgarh in connection with the projected lines of railway now under consideration.

No. 327, A, dated 9th April 1883.
N. 77, Statistics, dated 4th May 1883.

2. These lines are three in number, running respectively north, east, and south-east. The first will connect Chhattisgarh with the E. I. R. at Katni, *vid* Riwa territory; the second will connect Chhattisgarh with Calcutta, and, together with the present Nagpur and Chhattisgarh State Railway, will form part of a line of through connection between Calcutta and Bombay. The third line runs to the littoral of the Bay of Bengal at Vizagapatam. The prospects of this line have been already dealt with by the Chief Commissioner in a Minute, dated 7th April 1883, and the present report is therefore confined to the lines running northward to Katni and eastwards to Calcutta.

3. The country known as Chhattisgarh consists of an undulating plain surrounded by a belt of hills. The hills on the west form the boundary of the Bhandara and Balaghat districts and have been pierced by the only two good trade outlets Chhattisgarh possesses; first by the Great Eastern road to Nagpur, and lately by the Nagpur and Chhattisgarh State Railway, which has now been pushed some 50 miles beyond the hills into the Chhattisgarh plain. On the north the hills form an extensive block of wild and uncultivated country, stretching over the whole of the northern portion of the Bilaspur district, as well as the greater portion of the adjacent district of Mandla, and running eastwards in a broad belt along the border of Riwa and Chota Nagpur. The only trade outlets through this line of hills which in any way deserve mention are those running from the Bilaspur district over the Borla pass to Mandla and Jubbulpore, and over the Komo pass to Sohagpur in Riwa territory. But the trade which the difficulties of these routes admit of is at present unimportant. On the east Chhattisgarh is bounded by the Eastern Ghats, which form the boundary between the Central Provinces and Orissa and Ganjam. These Ghats are traversed by a road connecting Sambalpur with Calcutta, which was formerly used for the Bombay mails, but is now almost wholly deserted, and most of the traffic which crosses this part of the frontier is carried by the river Mahanadi, which is a trade route of considerable importance. The border country towards the south-east and south is, perhaps, the wildest of any, forming in places stretches of uninhabited hill and forest reaching as far south as the Godavari. The only traffic route in this direction is that running towards Vizagapatam, *vid* the Kalahandi State, along which a moderately large but decreasing traffic is carried by means of pack bullocks. This route very nearly coincides with one of the lines projected for the railway between Raipur and Vizagapatam.

Under these conditions it is to be expected that population should be densest and cultivation most continuous in the centre of the plain, and that both should fall off as one left the centre for the circumference. This is precisely the case. The thickly populated part of Chhattisgarh forms two blocks separated by a broad belt of jungle. One block constitutes the *khalsa* portion of the Raipur and Bilaspur districts,—the portion, that is to say, held by malguzars

direct from Government,—and the other block similarly constituted the *khalsa* portion of the Sambalpur district. These blocks of khalsa territory are bounded and separated from one another by tracts held in so-called *Zamindari* right, that is to say, by proprietors intermediate between the malguzars and Government. Beyond the Zamindaris again are a number of Feudatory chiefships which are connected with this Administration by political relations. The average density of population in these different regions is clearly shown by the following sketch map, in which Zamindaris are denoted by dots and chiefships by cross lines. The sub-divisions into which the *khalsa* area is divided are tahsils, which are four in number in Raipur, three in Bilaspur, and two in Sambulpur.

The general average density of population in the Dhamtari (Raipur) and Bilaspur tahsils is lowered by their including a large portion of waste country on their southern and northern borders respectively.

5. The total area of Chhattisgarh is nearly 40 thousand square miles, and its population is over 4½ millions. But it is not probable that the projected lines of railway will derive much traffic from any part of Chhattisgarh outside the khalsa, except from the Chiefships of Nandgaon and Khairagarh, which are of exceptional fertility. So far as railway prospects are concerned, attention may therefore be confined to the khalsa portion of the Raipur, Bilaspur, and Sambalpur districts, which, although only comprising one-quarter of the total area of Chhattisgarh, include nearly half of the number of its inhabitants.

6. The character of the country included in the khalsa of these three districts is by no means uniform. The most productive portions are those where the black so-called "cotton" soil of Central India occurs, since here not only rice but spring crops, such as wheat and linseed, can be profitably grown. Black soil occurs in isolated patches in several parts of Chhattisgarh, but only forms a continuous stretch at the westerm extremity, where it extends over the eastern portions of the Drug and Simga tahsils, the greater part of the Mungeli tahsil, as well as over a large portion of the Nandgaon and Khairagarh Chiefships. This tract may be certainly pronounced to be by far the most productive portion of Chhattisgarh. West of this belt the country stretches in a series of gentle undulations, the uplands consisting of poor reddish soil only suited for inferior crops, and the low lands of a yellow or reddish clay excellently fitted for the production of rice. Further east the broad strip of jungle is met with, which is the eastern boundary of the Raipur *khalsa*; and beyond it comes the Sambalpur *khalsa* which has for its prevalent soil the yellow clay mentioned above, and is almost wholly devoted to the production of rice.

The extent of cultivation and its distribution amongst the more important crops in the khalsa of each of the three districts is shown in tabular form below : ——

District.	Total area.	Area cultivable but not cultivated.	Area cultivated.		Percentage of cultivated area to total area.	
			At present.	At Settlement (1868-69.)	At present.	At Settlement. (1868-69.)
	Acres.	Acres.	Acres.	Acres.		
Raipur	32,60,878	10,66,422	19,28,361	16,28,518	59	49
Bilaspur	19,28,230	7,04,295	10,83,216	9,59,431	56	49
Sambalpur	5,63,993	1,27,775	4,36,218	...	77	...

Districts.	Cropped area (exceeding cultivated area by the extent of land bearing 2 crops within the year.)							
	Under wheat.	Under rice.	Under other grains.	Under oil-seeds.	Under cotton.	Under other crops.	Total.	Percentage of area under rice to total cropped area.
	Acres	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	
Raipur ...	1,81,214	11,74,770	5,32,552	2,35,069	15,518	9,856	21,54,979	54
Bilaspur ...	51,089	7,75,489	2,59,954	85,694	18,355	22,969	12,12,950	63
Sambalpur ...	...	3,63,540	35,849	19,594	17,235	...	4,36,218	83

None of these figures are entitled to strict credit. Those for Raipur and Bilaspur have been compiled from the village returns for 1882-83, and though very far from accurate, may be taken as approximately true. The village area of Sambalpur has never been mapped or measured, and the figures given for this district are merely estimates.

7. The average size of a single holding in the Raipur and Bilaspur districts is not less than 20 acres, that is to say, more than double the average size of a holding in the Bundelkhand districts of the North-Western Provinces, in which, as in Chhattisgarh, irrigation is but seldom practised, and which, therefore, offer a fair standard of comparison. The rain-fall has an average of about 40 inches, and the hills which encircle the districts generally ensure an adequate or nearly adequate supply. The soil is, as a rule, fertile, and in places is of more than average fertility. These causes have contributed to give Chhattisgarh the reputation of enjoying the largest surplus produce of any part of the Provinces. In 1868, the officer who had just completed the settlement of the Bilaspur district (Mr. Chisholm) wrote :—

"The adventurous carrier class (Banjaras) following their strings of bullocks though the hilly wilds which shut in the Chhattisgarh plain, in order that they may return laden with grain, have not inaptly termed the country 'Khalauti' (the land of threshing floors). They find here a surplus produce, which from the absence of facilities for export seems inexhaustible, for in a great number of villages they cannot fail to observe the prominent and capacious grain stores well raised above the ground, walled and thatched, and containing from 50 to 200 cart loads of the great staple—rice. Wheat, oilseeds and pulses are produced in great abundance, and there is a kind of reckless improvidence in many places in feeding, free of cost, all travellers who pass, that indicates a condition in which it may be said that want is almost unknown."

A rough idea of the extent of the annual surplus in the khalsa alone may be gathered from the following calculations. The average outturn per acre for wheat, rice, other miscellaneous grains and oilseeds was estimated by the Settlement Officer of Bilaspur 7, 6, 6 and 7 maunds respectively, and by the Settlement Officer of Raipur as 7, 10, 6 and 3 * maunds. It would be safe to assume 7, 8, 6, and 6 maunds as the rates of produce in ordinary years. In estimating the amount locally consumed wheat must be altogether omitted, for little or none of it is eaten in Chhattisgarh, and it is grown almost wholly for export. Of rice 4½ maunds and of other grains, principally small millets, 2 maunds would be an ample allowance per head of population,

* This estimate is believed to be for linseed grown as a second crop after rice. The Bilaspur figure represents the out-turn gathered when linseed was the only crop sown in the year.

since this gives a daily ration of ¾ seer (or 1½ lbs.) to each person of whatever age, and it should include a margin for wastage. For the consumption of oil, ½ a maund per annum per house is a liberal estimate; this is equal to 1½ maunds oilseed. Making a further deduction for seed the resulting surplus is as below.

	Total produce.	Amount consumed locally.	Amount used for seed.	Annual surplus.
Wheat ...	16,26,121	...	2,32,303	13,93,818
Rice ...	1,56,02,072	89,68,084	29,25,378	87,08,610
Other grain ...	48,15,036	37,76,036	3,96,253	6,42,747
Oil-seeds ...	19,20,978	8,67,287	32,016	10,21,675

In considering these figures it should be borne in mind, *firstly*, that they only relate to the khalsa protion of the Raipur and Bilaspur districts, and that the surplus produce of Zamindaris and Chiefships is not included. This surplus is very large indeed in the case of the Nandgaon and Khairagarh Chiefships, where wheat is extensively grown for export. *Scondly*, the surplus is rendered smaller than it should be by the inaccuracy of the statistics of area, which err very largely on the side of understating the extent of cultivation. Thus the area under wheat in Bilaspur is represented to have not increased since settlement, whereas it is a well known fact that there has been a very considerable increase. On the subject of these statistics the Commissioner writes:—

"From my own experience I can answer for the statistics of new cultivation since settlement being incorrect. For instance, in the low country, I found two years ago that the village papers showed little or no increase of cultivation, but when I went over the ground with the village books in my hand, I found that in many instances there was no cultivable land left uncultivated. Another proof of increase in cultivation is the fact that all wild animals, such as buffaloes and bison, have been driven from east of the Mahanadi. Ten years ago buffaloes swarmed in the Lon country (east of Balodo): now they are almost unknown west of the river."

8. Of the present trade of Chhattisgarh, there is very little definite information. The principal existing marts and trade routes are shown in the following sketch map.

The khalsa of Raipur and Bilaspur varies very greatly in fertility, and is very far from yielding a surplus produce over the whole of its area. The position of the most fertile tracts is indicated by

shading on the map. For the wheat-producing tract on the west, Mungeli, Dongargarh and Nandgaon are the principal marts. For the rice growing tract on the south, Dhamtari and a number of smaller marts; while Balodo is the collecting centre for the rice country towards the north-east (containing the fertile tract of Lon) and is perhaps the most thriving market in the two districts. The trade which Raipur town itself transacts is very considerable, but is drawn from the country north-east and south of it, and not from the tract in its immediate vicinity.

9. Until the opening of the Nagpur and Chhattisgarh State Railway, the road between Raipur and Nagpur was the main traffic outlet of the Chhattisgarh plain. Trade on this road was registered during the year 1871-1877, with the following results:—

Year.	To Chhattisgarh.		From Chhattisgarh.				
	Salt.	Total all commodities.	Wheat.	Rice.	Other grain.	Oilseeds.	Total all commodities.
1871-72 ...	1,47,428	1,64,428	2,82,748	3,45,791	85,185	53,279	8,00,339
1872-73 ...	2,21,698	2,26,659	3,66,198	4,01,759	1,34,558	25,653	10,25,068
1873-74 ...	1,21,702	1,33,023	2,92,439	3,79,203	1,71,192	1,61,479	10,42,045
1874-75 ...	1,37,542	1,67,305	2,29,059	2,66,025	2,68,671	1,95,126	10,32,519
1875-76 ...	84,329	1,04,300	2,50,502	2,41,472	69,496	5,70,662	11,67,901
1876-77 ...	...	1,07,752	...	...	...	...	12,48,429

The very considerable stream of traffic along this road was one of the principal reasons for the construction of the Nagpur and Chhattisgarh Railway, which runs almost parallel to, but at some distance from it. The railway first commenced to carry Chhattisgarh traffic when opened to the Amgaon station on the western side of the line of hills bounding the Raipur plain. This took place in November 1881, and in December 1882 the line was carried through the hills to Nandgaon, 50 miles on their eastern side. An indication of the effect which the railway has had on the traffic running parallel to it by road is given by the receipts at a toll-bar situated on the Raipur-Nagpur road, almost exactly midway between these places, which are compared below with the exports from the Nandgaon and Dongargarh stations (within the Chhattisgarh

plain) and the Amgaon station (immediately outside it) up to the end of June 1883:—

		Exports from *			Total Receipts on the Nagpur road.
		Amgaon.	Dongargarh.	Nandgaon.	
		Mds.	Mds.	Mds.	Rs.
1881	Half-year ending June 30th	.....	.....	.....	10,476
	,, Dec. 31st	1,976	.....	.....	2,683
1882	Half-year ending June 30th	34,949	.....	.....	9,547
	,, Dec. 31st	3,590	10,351	4,724	1,056
1883.	Half-year ending June 30th	*	7,54,655	14,92,653	2,486

The opening of the line to Amgaon had but little effect on the road traffic, but its extension to Nandgaon has decreased it by three-fourths. The exports from the Dongargarh and Nandgaon stations during the seven months since they were opened (from December 4th 1882, to June 30th 1883), have been great beyond all expectation, and would have been greater had the railway been able to carry more. They are shown below:—

	From Dongargarh.	From Nandgaon.
	Mds.	Mds.
Rice	2,07,467	5,83,799
Wheat	3,68,950	5,14,417
Linseed	1,73,043	3,96,962
Total all commodities ...	7,69,586	15,21,518

Estimating the road traffic of the half-year at ¼ of its amount in 1876-77 (when the toll receipts amounted to four times their figure for the past half-year), the opening of the railway is shown to have increased export by 128 per cent.

10. The remaining trade routes are of very minor importance. The Bilaspur district is connected with Jubbulpore to the north-

* Complete figures not obtainable for Amgaon for this half-year, but the exports for the first quarter only amounted to 960 maunds.

west and with Sohagpur to the north by two roads which are only practicable for pack-bullocks, one running *viâ* the Borla, and the other *viâ* the Komo pass. The traffic carried by both these routes was registered during the year 1871-1877, and the results are abstracted below:—

	Imports into Bilaspur.		Exports from Bilaspur.				
	Salt.	Total all commodities.	Wheat.	Rice.	Other grains.	Oilseeds.	Total all commodities.
	Mds.	Mds.	Mds	Mds.	Mds.	Mds.	Mds.
1871-72 ...	1,266	10,430	11,890	79,281	985	...	1,10,738
1872-73 ...	5,824	19,193	4,154	98,231	2,560	2	1,54,128
1873-74 ...	8,165	18,737	1,81,136	1,27,205	5,253	297	3,47,152
1874-75 ...	2,707	10,463	83,635	1,37,935	11,391	1,695	2,79,234
1875-76 ...	339	12,071	21,105	20,561	10,337	5,617	77,311

In comparison with the large annual surplus available for export the traffic is insignificant, but considering the difficulties of the road and the cost of transport, it is rather a matter for surprise that there should be any traffic at all than that the traffic should be a small one. It has been calculated that there must be a difference in price between Bilaspur and Jubbulpore, amounting to 200 per cent. before it can pay to carry a consignment of wheat from one place to the other.

No statistics whatever are available of the traffic of the Mahanadi, which is known to be not inconsiderable. It is fed partly from Seorinarain in the Bilaspur district, partly from the town of Sambalpur, and partly from the towns of Binka and Patna at the south-east corner of the Sambalpur district.

The exports principally consist of rice, in return for which large quantities of cocoanuts and some salt are brought up-stream to Binka whence they are distributed by cart.

The remaining traffic route is that running towards the Madras Coast from the south-east corner of the Raipur district, and the trade along this line has been already discussed in the Chief Commissioner's Minute on the projected railway between Raipur and Vizagapatam. It is not of any great present importance. The mainstay of the trade was the import of salt for consumption of the eastern portion of the Raipur and Bilaspur districts. This import is now giving way before the Bombay salt, which is thrown into Chhattisgarh by the railway from Nagpur. The eastern portion of the Bilaspur district has always hitherto consumed Madras salt, but during the last year Madras salt was altogether supplanted by the Bombay article.

11. So far, then, as existing traffic is concerned, Railway lines

running either north or east from Chhattisgarh will not have much to commence upon. But the insignificance of the trade at present is entirely due to difficulty of communication, and there is little doubt that a large export would be at once created by the removal of this difficulty. In this export trade wheat, rice and oilseeds would form the staple commodities, but a considerable accession of traffic may be expected from forest produce, especially lac, which is at present exported to Mirzapur in large quantities. The return traffic is likely to be a light one for some years, since the population of Chhattisgarh is almost entirely rural, and will take time to become large consumers of foreign manufactures. They will require an annual supply of at least 4,50,000 maunds of salt, and their annual consumption of European cotton goods and metals may be safely estimated at 1,20,000 maunds and 80,000 maunds, respectively.

12. There are two sides from which the resources of Chhattisgarh deserve special consideration: one is in relation to its future position as a wheat exporter, and the other is in relation to famine supply. For the production of wheat on a large scale, Chhattisgarh enjoys many striking advantages. The climate is suitable, and there is abundance of the black soil which produces the wheat of the Nerbudda valley, on which wheat can be grown year after year without either manure or irrigation. In order to ascertain the extent of this soil in the Raipur and Bilaspur districts, an elaborate investigation has been made, based on an examination of the Settlement records of each village in the two districts. The general result of this enquiry is shown below :—

Districts.	Area of black soil suitable for wheat.			
	Sown with wheat at present.	Sown with other crops (principally rice) at present.	Uncultivated at present.	Total.
	Acres.	Acres.	Acres.	Acres.
Bilaspur ...	51,089	3,13,413	2,17,194	5,81,696
Raipur ...	1,81,214	1,24,641	1,20,281	4,26,136

Were the production of wheat encouraged by increased facility of export there is little or no doubt that the area under it would be enormously increased, not only by the breaking up of new land, but also by its appropriating the area of black soil on which rice is now grown, but which is, *if anything*, not so well suited to the production of rice as the yellow and red clays, which abound to the centre and east of the districts. Were the cultivation of

wheat extended to the full area of black soil available, and the whole of the produce exported, there would be, making a deduction for seed, an annual export of nearly 60 lakhs maunds or one million quarters. It may be held desirable to consult the interests of the wheat trade in aligning the railway, with a view to this a sketch map is appended, which shows the distribution of black soil in the Raipur and Bilaspur khalsa, based on calculations made village by village.

It will be seen that the area of black soil is most continuous on the west of the Sheonath river. The percentage of black soil to the total area in each of the seven tahsils of the Bilaspur and Raipur districts is as follows :—

Western tahsils.			Eastern tahsils.		
Bilaspur	...	19	Seorinarain	..	14
Mungeli	...	43	Simga	...	18
Drug	...	17	Rajpur	...	7
			Dhamtari	...	10

A line leaving the Nagpur and Chhattisgarh State Railway at Dongargarh and running round, south of Mungeli, to Seorinarain, would therefore be the one most suited to the requirements of the wheat export traffic. It may be noted that such a line would avoid crossing either the Sheonath or Mahanadi. The connection of Raipur with Nandgaon would in this case be left to an extension of the Vizagapatam line.

13. So far as famines are concerned, Chhattisgarh can afford to contemplate Railway extension from the exporting side. The advantages which it enjoys in comparative certainty of rain-fall have been already touched upon, and although in the present paucity of communications the occurrence of a famine in Chhattisgarh would be a terrible disaster, it is fortunately a contingency which does not require very serious consideration. But these reasons from another point of view are the strongest which could possibly be urged in favour of opening up by railways a tract which may be regarded as one of the granaries of India. The large exports of grain which poured from these Provinces during the period of the Madras famine were largely drawn from Chhattisgarh, at a time when the only means of communication between Raipur and Nagpur was a road involving a journey of at least 10 days either way. The enormous exports from the Nandgaon and Dongargarh stations during the last six months are an indication of the extent to which export of grain in famine times could be increased, were roads supplanted by railways. The Government of India make special reference in their enquiries to the possibility of Chhattisgarh providing fodder for a large number of Northern Indian cattle in the event of a famine. Good cattle fodder is as scarce in Chhattisgarh as in most other rice districts, and the miserable condition of the village cattle in Raipur and Bilaspur testifies to the innutritiousness of rice straw as a diet. Under present circumstances, therefore, the capabilities of Chhattisgarh in the direction

of fodder supply would be limited to the grass in which its jungles abound, and which annually makes the hills and forests round its borders a favourite hot weather pasture ground for thousands of cattle.

From H. H. RISLEY, ESQ., *Offg. Deputy Commissioner of Manbhoom, to the Secretary to the Government of Bengal, Public Works Department (Railway Branch.)—No.* 409*R, dated Purulia the 7th May* 1883.

WITH reference to Government order No. 4472A, dated 16th December 1882, deputing me on special duty to enquire into the trade of Chota Nagpore as affecting the prospects of the proposed Railway from Sitarampore to the Central Provinces, I have the honor to submit a report on the subject with two maps—one illustrating the general course of trade in Chota Nagpore, and the other showing the places where limestone has been discovered in the neighbourhood of the Burrakur Iron works.

2. The submission of the report has been delayed, partly by difficulties in obtaining detailed statistics of the trade of the East Indian Railway, partly by the labour of compiling the statistics of local registration from badly written vernacular reports, and partly by press of work thrown upon me after taking charge of this district.

3. If the report is deemed worthless for statistical purposes, I would ask that it may be remembered that in a demi-official letter to Mr. Levinge, written in December, I pointed out the extreme difficulty of obtaining any statistics whatever, and generally deprecated my deputation on duty, the results of which were not likely to bear any reasonable proportion to the time spent on fruitless enquiries. I believe the report exhausts all existing sources of information, but it is doubtful whether any one who knows the Chota Nagpore Division well will accept those parts of it which deal with quantities as fairly representing the real trade. At the same time, without going into mere guess-work, it is difficult to see how the quantities can be raised; and there always remains the argument that, if the avowed object of the railway is to create a trade, it is illogical to ask for statistics of that which *ex hypothesi* does not yet exist.

Report of the trade of Chota Nagpore in its bearing on the proposed Railway from Sitarampore to the Central Provinces.

1. *Plan of this Report.*—An attempt will be made in this report to describe the general character of the country included in the Chota Nagpore Division; its mineral and agricultural products; the marts at which the trade of the area is collected, and the routes by which it is conveyed. Having thus indicated roughly the resources of the country as a whole, I shall proceed to discuss in detail the chief articles with which its trade is concerned, and shall endeavour to frame from such data as are available an approximate estimate of the probable trade on the proposed railway from Sitarampore on

the East Indian line to Nagpore in the Central Provinces during the first few years of its existence. With the through traffic which may be looked for between the Central Provinces and Calcutta, I shall not attempt to deal, nor shall I concern myself with *local* trade, properly so called, between places situated within Chota Nagpore.

2. *Character of the country.*—The Chota Nagpore Division is a pear-shaped tract of hilly and undulating country, forming three successive steps from the high lands of Central India to the alluvial plains of Bengal. On the extreme west of the division, the Tributary States, a confused mass of hills, ravines and plateaux, project like a wedge into Rewa and the Central Provinces, sending off streams on the north towards the Sone and the river system of Behar, and on the south towards Orissa and the Bay of Bengal. It is believed that, at a remote geological period, the entire country now included in the Tributary States formed a uniform table-land, elevated about 3,600 feet above the sea. Traces of such a state of things are to be found in the flat-topped hills. Locally known as *pâts*, several of which mark the descent from the State of Sirgoojah into the British district of Lohardugga. The combined action of rivers, wind and rain has long since broken up the original plateau into a hill system so complicated as to render it impossible to define the physical features of the Tributary States with minute precision.

3. *Lohardugga District.*—The district of Lohardugga, forming the central and north-western portion of the division, comprises three tracts of country, which differ essentially in aspect and physical conformation—Chota Nagpore proper, the five pergunnahs bordering on Manbhoom and the sub-division of Palamow. Chota Nagpore proper, as distinguished from the Commissioner's Division bearing that name, is an elevated table-land situated about 2,100 feet above the sea, and occupying the central and southern portion of Lohardugga district. The five pergunnahs on the east resemble in most respects the adjoining district of Manbhoom. Their average elevation is about 1,000 feet less than the central plateau. On the north-west the table-land falls away into the sub-division of Palamow, which extends on the north to Behar and the Mirzapore district of the North-West Provinces. On the east and south, Palamow consists of spurs thrown off from the plateaux of Hazaribagh and Chota Nagpore proper, while the rest of the sub-division is a tangled mass of isolated peaks and long irregular stretches of broken hills. The average elevation of the country is about 1,200 feet above sea level, but the surface is wilder and more cut up by rock and jungle than in Chota Nagpore proper, and there are no level areas of any extent except the valleys of the North Koel and Amanat, to which rice cultivation is confined.

4. *Hazaribagh District.*—On the north and north-east of Lohardugga, the central plateau of Hazaribagh rises to an average height of 2,000 feet above the sea. This plateau, which is connected by a narrow neck of land with the corresponding level in Lohardugga, occupies only a limited area, while the rest of the district lies at an average elevation of 1,200 or 1,300 feet above sea level. The nor-

thern portion of Hazaribagh is divided by a well marked range of hills from the plains of Gya district, which are about 800 feet below the lower level of Hazaribagh.

5. *Manbhoom District.*—Due east of Lohardugga, and south-east of Hazaribagh, the district of Manbhoom forms the last step in the gradual descent from the high land of Central India to the delta of Bengal. Here the undulations of the surface become less pronounced, and follow each other at longer intervals than in Lohardugga and Hazaribagh, the whole level tracts of considerable extent are of more frequent occurrence. In the central and eastern portions of the district the country is open and consists of rolling downs, dotted here and there with isolated conical hills. The average elevation may be taken at 800 feet above sea level.

6. *Singbhoom District.*—The south-eastern corner of the division is occupied by the district of Singbhoom, an elevated basin shut in on the north-west and south, by the spurs of the Chota Nagpore plateau and the hills of the Orissa Tributary States, and imperfectly open on the east towards the district of Midnapore. Chaibassa, in the centre of the district, is about 700 feet above the sea; but the surrounding ranges of hills are considerably higher.

7. *Geological Character.*—The prevailing geological formations of the Chota Nagpore Division belong to the metamorphic or granite and gneiss series, and to the sub-metamorphic or slate and quartzite series. Coal-bearing shales and sandstones occur over the whole area except in the district of Singbooom, frequently in conjunction with iron stone shales and hœmatite. The known coal-fields of the division, and some of their more important characteristics, are shown in the following table:—

Number.	Name of Coal-fields.	Where situated.	Area in square miles of coal-bearing strata.	Thickness of coal-bearing strata.	Estimated yield in tons.	Percentage of carbonash and volatile matter.	Maximum thickness of seams.	Remarks.
			Sq. M.	Feet.			Feet.	
1	Lakharpur ...	Sirgoojah State	400	4,500	.....	.....		
2	Bisrampur ...							
3	Jhilmilli ...	Sirgoojah ...	35	.....	.....	.....		
4	Hingir or Raigurh.	Gangpur Tributary State.	400	....	.....	Carbon 39·9 Ash 26·5 Volatiles 33·6	6½	Dip of coal-bearing strata very small.
5	Aurunga ...	Lohardugga District.	97	1,500	20,000,000	Carbon 36·5 (*a*) Ash 27·5 Volatiles 29·3		(*a*) Specimen taken from old surface coal; better results expected from lower seams.
6	Hutar ...	Lohardugga ,,	78	2,750	.....	Carbon 55·35 Ash 10·7 Volatiles 28·	.....	
7	Daltongunge ...	Ditto ...	200	....	11,600,000	Carbon 64·4 Ash 13·4 Volatiles 22·4		
8	North Karun pura.	Hazaribagh ...	472	2,000	8,750,000,000	Carbon 64·5 (*b*) Ash 8·5	..... 77 feet average.	(*b*) Specimens analyzed were taken from the best coal of both fields.
9	South Karan pura	Ditto ...	72	....	75,000,000	Volatiles 27.	30 to 40 feet.	
10	Ramgurh ...	Ditto ...	40	4,000	.....	.....	.....	
11	Bokaro ...	Ditto ...	220	....	1,500,000,000	.....	.....	
12	Itkhuri ...	Ditto ...	22½	....	2,000,000	Ash 30 per cent.	.....	
13	Chope ...	Ditto ...	¾	....	.....	* (*c*)	.....	* (*c*) Not regularly tested, but reported worthless except for lime-burning.
14	Karharbari (*d*) ...	Ditto ,,	11	....	1,360,000,000	Carbon 67·51 Ash 11·67 Volatile s20·82	.....	(*d*) worked by East Indian Railway.
15	Jheria ...	Manbhoom ...	200	4,900	4,63,000,000	Carbon 58 to 62 Volatiles 37 to 40 Ash 11	60 feet	Average thickness 24 feet. Dip of strata slight.

8. *Coal. The Jheria field.*—Of the coal-fields enumerated above only two have any direct bearing upon the prospects of the railway from Sitarampore; the Jheria coal-field (No. 15 on the list), and the Hinger coal-field (No. 4 on the list). The greater portion of the Jheria field lies north of the river Damoodar in the sub-division of Govindpore. Its length from east to west is about 18 miles, its greatest breadth from north to south being 10 miles. Its south-eastern corner, marked by the village of Tasra on the north bank of the Damoodar, is about 12 miles from Jhapra, a village between Purulia and Raghunathpore, through which the line will pass. There would be little difficulty in constructing a coal line up to the Damoodar through the country traversed by the existing road from Jhapra to Govindpore. The surface undulations are trifling, and hardly any bridging would be required, as the line would run parallel to the small streams draining into the Damoodar. During the dry season coal could be transported across the river on a temporary bridge, operations being wholly suspended in the rains. Of that part of the field which is situated to the north of the Damoodar, the eastern portion belongs to the zemindar of Jheria, and the western to the zemindar of Nowagur, a minor under the charge of the Court of Wards. A narrow strip of coal-bearing strata on the south of the Damoodar, lying about 12 miles from the nearest point on the line, belongs to the Rajah of Pachete. If the coal of this southern strip is as good, and the strata dip at as small angles as in the northern area, the southern part of the field should apparently be opened up first, the Damoodar will in any case interfere with the transport of coal from the northern section of the field. The entire question will doubtless be carefully worked out when the construction of the railway is sanctioned. It may be gathered from the geological reports that the Jheria coal-field presents special facilities for cheap working, in that the coal lies very near the surface, and the strata dip at unusually small angle to the horizon.

9. *The Hinger field.*—The line will pass through the southern portion of the Hingir field situated partly in the Chota Nagpore Tributary State of Gangpur, and partly in the state of Raigurh in the Central Provinces. In discussing the probable economic value of this field, Mr V. Ball, F.R.S., remarks *:—

"The seams which are exposed in the portion of the field at present under description are neither very numerous nor individually of promising quality; but it must be remembered, that the coal measure rocks are not only as a whole very slightly disturbed from their original horizontal position, but are much covered by superficial deposits, and that there is a complete want of sections which might show the succession of beds constituting the group. The true or even approximate value of the field, therefore, can only be ascertained by borings. In the meantime it may safely be asserted that there is a fair prospect of this field proving to be of considerable value."

* Records, Geological Survey of India, volume VIII, part 4.

10. *Iron and Limestone.*—An elaborate report on the iron works at Barrakur, which are about to be experimentally worked

by Government, has been published in the *Gazette of India*, and I need not attempt to discuss the prospects of the scheme. A copy of a map prepared by Ritter Von Schwarz, the Engineer in charge of the works, showing the places where iron ore, limestone and coal occur in the immediate neighbourhood of the iron works, is annexed to this report. The probable demand on the railway for carriage of manufactured iron, limestone and lime is roughly estimated in paragraph 75 below.

11. *Copper in Singbhoom.*—In 1854 the copper veins and mines of Singbhoom, worked in pre-historic times by a people whom local tradition alleges to have been Jains, were described by Captain J. C. Haughton in the Asiatic Society's Journal. His paper attracted the notice of two Calcutta merchants, who engaged Mr. Emil Stöhr, a skilled mining geologist, to make investigations. In 1857 a Company was started, and fine raw ore was turned out at the rate of from 1,200 to 1,300 cwt. a month, and delivered in Calcutta by way of Purulia and Raneegunge. From the first the enterprise was conducted on too expense a scale. A high mining rent was paid, and a foundry with a steam engine was erected at great cost before there was ore enough to supply it. In 1859 the Company was dissolved, and the buildings and machinery sold at a nominal price. In 1862 a second Company was formed, only to be dissolved in 1864, without having paid even their mining rent for the two years during which they worked.

12. The copper ores are described by Mr. V. Ball, F.R.S., as occurring in a zone of schists forming the northern flank of a broken spur of hills thrown off from the plateau of Chota Nagpore. Measured along the strike, these copper-bearing rocks extend in an easterly and south-easterly direction for nearly eighty miles. The metal occurs both in lodes and as a deposit disseminated through the materials which compose the schists. There is no reason to believe that the supply of ore has been exhausted either by the ancient miners, or by recent workings. The failure of the two European Companies is fully accounted for by the unhealthiness of the climate, the bad means of communication, and the scanty supply of fuel and lime. Within the last twenty years the wholesale clearing of jungle has materially improved the climate, while the railway passing through the copper-bearing rocks may be relied on either to supply the means of reducing the ore on the spot, or to convey it to any place selected for the establishment of a foundry.

13. *Copper in Manbhoom.*—Copper is believed to occur also near Dhadka in Manbhoom, about 35 miles to the east of the proposed line; but no scientific account of the deposits has been published, and I have no means of determining their probable value. Lead, containing a large proportion of silver, is said to have been found in the same neighbourhood.

14. *Minerals in Hazaribagh.*—In Hazaribagh lead of good quality has been found in scattered nodules, but the sources of

the metal have not been tracted. Tin, copper and antimony have been worked at various times, both by Europeans and Natives, with very moderate success. A Company has recently been started to work copper mines at Baragonda, near Giridi, in Hazaribagh, and their shares are now quoted at a premium. Mica occurs in many places in the north of Hazaribagh district, where some mines long managed on a wasteful system by natives have recently been opened out by European practical miners. As none of the minerals found in Hazaribagh are likely to be carried by the Sitarampore-Nagpore Railway, I need not discuss at length the conditions under which they might be profitably worked. I will merely remark that, in the event of the Patna-Gya State Railway being extended through Palamow along the Damoodar valley to Purulia, the iron ores and coal of perguna Karanpura, south-west of Hazaribagh, may come to be of considerable value. It is doubtful, indeed, whether limestone can be found in sufficient quantities to support large iron works, but this point does not seem to have been very fully enquired into.

15. *Potstones.*—The trade in potstone plates is said to have increased greatly of late years. Its chief centre is Patcoom in the south-west corner of the district. The opening of the railway will probably stimulate the demand for these heavy articles. The supply of the stone is said to be unlimited. The following remarks on the subject are extracted from a paper on Manbhoom district by Mr. V. Ball:—"Chloritic schists, passing on the one hand into talcose, and on the other, into serpentinous rocks, occur not uncommonly in the sub-metamorphic, and somewhat less frequently in the metamorphic series. In building, the varieties of this material have only been used on a small scale for ornamental purposes, for which some of them, as being tough and at the same time easily carved, are particularly suited. They are more extensively employed in the manufacture of altars, in idols, plates, and bowls. In the outhern part of Manbhoom, on the frontiers of Singbhoom there are numerous workings which generally take the form of narrow mines, but are deserted during the rains. From these mines a considerable quantity of stone is annually extracted; the blocks are roughly dressed to the shape required, be it for *lingam* plate or bowl. They are then fixed in a rude lathe, cut into form, and finished with a smooth surface. When finished they are carted off to Burdwan, where they are in great demand, and a portion are sect on to Calcutta for sale. One class of the varieties used stands fire well, while the other does not. The former is of course the most esteemed by the natives. The cracking of the latter is probably due to the water in combination in the more chloritic varieties which becomes released on the application of heat. In many of the ancient temples in Chota Nagpore, images made from this material are met with."

16. *Forests.*—The gradual spread of cultivation, the incessant demand for railway sleepers, and the practice of girdling the trees for resin, have combined to denude the districts of

Hazaribagh, Lohardugga and Manbhoom of most of their valuable sâl forests. Extensive jungles still remain uncleared in these districts, but nearly all the trees big enough to make sleepers have been thinned out, and little besides saplings is left. Forest reserves have been formed by Government in the north-west of Hazaribagh, in the south of Palamow and in the western corner of Singbhoom, and throughout the division the landholders are now beginning to establish small reserves locally known as *rakhwats*. These, however, are not worked on any regular system; their boundaries are usually ill-defined, and the conflicting claims of the landlord and the villagers are a fruitful source of litigation in the Criminal Courts. A scheme for preserving the private forests of Chota Nagpore has recently been under consideration by Government. Forest officers were deputed to examine the forests, but it is believed that, except in Singbhoom, which has only been resorted to for sleepers within the last two or three years, and in the south of Lohardugga the private forests of the division contain little timber worth preserving. In the Tributary States the original forests are still virtually untouched. Cart-roads do not exist, and the rivers cannot be used for floating timber. Here the proposed railway will open out an enormous area of virgin forest which, if properly worked, ought to meet almost any demand for an indefinite period.

17. *Agriculture. Rice cultivation.*—The system of agriculture followed in Chota Nagpore is determined, particularly in the case of rice, by the physical conformation of the country. This consists mostly of long undulating ridges between which the drainage runs off to join the large streams. The lower slopes of these ridges, and the swampy ground between, supply the only land on which a wet rice crop can be raised. The soil is, in the first instance, brought under cultivation by cutting level terraces out of the hill side, a small bank to hold up water being left round the edge of each plot. The hill sides, thus treated, present the appearence of a series of steps, varying from one to five feet in height; and when the slopes are too steep for terracing, or the soil too stony for cultivation, the bed of the stream is banked up and made into one long, narrow rice-field.

18. *Oilseeds and other upland crops.*—Wheat, barley, various kinds of millet, Indian-corn *marua*, pulses, oilseeds, sugarcane, betel-nut, cotton, tobacco, are cultivated on the higher levels of the surface where the rice terraces leave off. In Hazaribagh and Chota Nagpore proper, tea is grown by European planters on lands of this class. In 1880-81 thirty-six tea plantations had been opened in the two districts. The gross yield for that year is reported as 237,666 pounds.

Tea.

19. *Agricultural statistics.*—Attempts were made at the time of the revenue survey, about twenty years ago, to record the area actually under cultivation, and to distinguish between cultivable and uncultivable waste. Conjectural estimates of the area under

particular crops have been framed at various times by the district officers. None of these statistics can claim to be even approximately accurate. Within the last twenty years the cultivated area has been continually extended, and it frequently happened that the survey of a particular village was made at a time when there were no crops on the ground. Again, owing to the nature of the country, it is in many cases difficult to say whether a given plot of land is cultivable or not; and steep slopes which have the most sterile appearance are frequently terraced into rice lands. Although no estimate of the area of cultivable waste would possess the smallest statistical value, there can be little doubt that the opening out of the country by the railway will be followed by an enormous extension of cultivation. It may even be hoped that emigrants from the overcrowded districts of Behar will not only break up fresh land, but also introduce improved methods of agriculture. Recent enquiries into the cultivation of sugarcane in Manbhoom have shown that the local cultivators are far behind the ryots of Behar both in their system of tillage, and in their treatment of the canes when cut. Almost the only villages where any improvement on the old methods can be traced are those held by Hindoo middlemen from Behar.

20. *Area and population.*—The area and population of the Chota Nagpore Division, as ascertained in the Census of 1881, are as follow :—

	Area in square miles.	Population.
Lohardugga	12,045	1,609,244
Hazaribagh	7,021	1,104,742
Manbhoom	4,147	1,058,228
Singbhoom	3,753	453,775
Tributary States	16,054	678,002
Total ...	43,026	4,903,991

21. *Strength of the aboriginal element.*—The details of the Census of 1881 have not yet been published, but it may be noted that, of the population recorded in the previous census of 1872, 54 per cent. belonged to aboriginal or semi-aboriginal races. Taking the division as a whole, we may fairly assume that at least 50 per cent. of the population are more or less of aboriginal descent. No difficulty, therefore, need be anticipated in procuring cheap labour for the earthwork of the new railway, even in the most unhealthy parts of the line. The aborigines of Chota Nagpore are conspicuous for their immunity from malarious fever, and it is mainly by labourers of this class, imported into Assam, that new tea gardens are opened out in that unhealthy province.

22. *Exports and Imports.*—The chief exports of the Chota Nagpore Division are the following :—

Rice ... Chiefly from Manbhoom and Singbhoom.
Indian-corn ... Chiefly from Manbhoom.

Wheat	...	From Hazaribagh.
Pulses	...	Mung (*Phaseolus Mungo.*) Urid (*Phascolus Roxburghii*) known as Biri in Manbhoom. Gram (*Cicer Arietinum*) from Hazaribagh.
Oilseeds	...	Sarsua—mustard. Til (*Sesamum Orientale.*) Tisi—Linseed. Surguja—(*Guizotia Oleifera.*)
Cotton	...	Only from Palamow.
Timber	...	From South Lohardugga and North Singbhoom.
Bamboos	...	
Chope	...	Or rope made of jungle fibre.
Babui	...	String made of babui grass.
Tasar Silk	...	Manbhoom and Hazaribagh.

Tasar Cocoons.
Hides.
Horns.

Shellac	...	From Lohardugga and Manbhoom.
Ghee	...	Manbhoom, Hazaribagh and Palamow.
Tea	...	Hazaribagh and Lohardugga.

Jungle products.
Petals of the mohua tree.
Catechu.
Resin.
Stick-lac.
Dye substances of various kinds.
Wax.
Gallnuts (haritaki.)

Coal	...	From Manbhoom and Hazaribagh.
Iron	...	From Hazaribagh and Lohardugga.
Mica	...	From Hazaribagh.

The chief imports are—
European piece-goods.
European twist.
Blankets.
Salt.
Spices.
Betel-nut.
Molasses.
Tobacco.
Umbrellas.
Brass utensils.
Paper.
Wines and spirits.
Oilman's stores.
Gunny-bags—to Hazaribagh.

23. *General course of trade.*—It will be clear from paragraphs 2 to 6 above, and from the annexed map, on which the chief lines

of hills have been roughly delineated, that on the west and south Chota Nagpore is shut in by the hills of the Central Provinces and Orissa, while there are but few practicable outlets through the bordering ranges which mark the descent into the plains of Behar. Hence the main currents of export trade, like the main lines of drainage, follow the natural slope of the country from west and north-west towards the east, converging gradually, after entering Manbhoom district, on the railway stations of Burrakur, Raneegunge, Panaghur, Durgapore, Mankur and Burdwan, and the trade centres of Bankura, Sonamukhi, Rajgram, Mejhia, Bishanpur and Indas. Three main exceptions to this general rule deserve special notice—

(i.)—Of the surplus produce of Palamow and Sirgoojah, which is collected in the marts of Garwa, Daltongunge, Hosenabad and Moharajgunge in Palamow, nearly the whole is exported to Gya, Shahabad and Mirzapore, and it may be expected that the Gya-Patna State Railway will attract a continually increasing proportion of the trade of these marts, as well as of Chatra in the west of Hazaribagh.

(ii.)—Part of the trade of the north of Hazaribagh, collected in the mart of Mirzagunge, finds its way into Monghyr district; part is exported from Giridi on a branch of the East Indian Railway; while a considerable portion of the export trade of Chatra goes to Gya.

(iii.)—The export trade of that part of Dhalbhoom, the eastern pergunnah of Singbhoom, which lies to the east of the Kapargadi hills, has its natural outlet towards Midnapore. Ghatsila, the chief village of Dhalbhoom, is not much more than 60 miles from the mouth of the Midnapore Canal, and we may expect that, when the roads in Singbhoom are put in order, a very considerable traffic will pass out of the district by this route.

24. *Export routes.*—The areas of country which either now export, or may ultimately be expected to export, by way of Gya, Giridi, and Midnapore have been roughly marked on the map in blue. At present a certain proportion of the trade, even of these remote parts, flows towards Raneegunge, but it can hardly be expected that this reversal of natural conditions will continue when communications come to be improved. All the exports from the remaining areas find their way sooner or later through Manbhoom district on one or other of the roads marked by red lines on the map to the districts of Burdwan and Bankoora, and in particular to the great mart of Raneegunge, either for local consumption or for transport to Calcutta from stations on the East Indian Railway.

25. *Hazaribagh District.*—Chatra, about 36 miles north-west of the civil station, is the chief market of the Hazaribagh district. Situated on a comparatively level tract between the central plateau of the district and the tangled mass of rock and ravine which forms its western frontier in such a way as to command the openings of the passes from the north-west, west, and south-west, it is well suited by its position to be the distributing market for the country

produce of Palamow and the Tributary States. The principal articles imported in to Chatra are the following :—Rice, Indian-corn, oil-seeds, pulses, and mohua petals are imported from Lohardugga and the Tributary States of Gangpur, Jushpur, and Sirgoojah. From the same places are also brought stick-lac, resin, itasar silk, cocoons, gum, cotton, and unwrought iron. The districts of Gya and Shahabad send wheat, gram, masur *(ervum lens)*, khesari *(lathyrus sativus)*, and similar cereals, as well as turmeric, pepper, and other vegetables. Zinc and tin are also sent in small quantities from these districts. Tobacco is imported from Patna. English cloth, brass or bell-metal, household utensils, salt, pepper and *supari*, or betel-nut, are imported from Burdwan, Raneegunge and Calcutta. The export trade supplies Lohardugga and the Tributary States with English cloth, salt, pepper, tobacco, household utensils, turmeric, &c. Rice, Indian-corn, maruá (*eleusine coracana*) pulses, mohua flowers, and ghee are sent to Gya and Shahabad. Oil-seeds ghee, mohua flowers, gram, oil and molasses are also exported to Burdwan and Raneegunge. Patna takes iron and certain proportion of stick-lac; but the bulk of the lac which finds its way into the Chatra market is sent to the great lac factories of Mirzapore district. Almost the whole of the Chatra trade is carried by pack-bullocks as the passes leading up to the town on all sides, except the east, are at present inaccessible to carts.

26. *Trade of Chatra.*—The following estimate of a year's trade between Lohardugga and Chatra is taken from Mr. Spring's notes on the alternative line from Surti through the Damoodar valley, Lohardugga and Sirgoojah (Collection of papers on railway surveys, page 47):—

Exported from Lohardugga to Chatra.	Maunds.	Imported to Lohardugga.	Maunds.
Grain of sorts	40,000	Salt	7,000
Oil-seeds of sorts	35,000	Tobacco	6,000
Cotton	4,000	Goor	3,000
Lac	3,000	Wheat, spices, cloth	1,000
Iron, gum, mohua, leather, &c.	6,000		
Total ...	88,000	Total ...	17,000

Mr. Spring also notices "a comparatively active iron industry" in the town of Tandwa, about 18 miles south-west of Hazaribagh. Tandwa is the centre of the indigenous iron manufacture of the Karanpura valley, and supplies Chatra with a large proportion of the iron afterwards exported to Behar. The export trade of those parts of Hazaribagh, which do not deal through Chatra, is collected at Chumparan, Burhee, Barsot, Barkatta, Atka, Bagodor and Dumri on the Grand Trunk Road; at Mirzagunge, Pachumba and Giridi in the north-east of the district; and at

Gola and Pitarbar in the south-east. The marts on the Grand Trunk Road deal for the most part direct with Raneegunge, but a small proportion of their produce is taken on to the East Indian Railway at Burrakur. Mirzagunge and Pachumba despatch their surplus from Giridi; while Gola and Pitarbar trade with the important mart of Jhalda, 28 miles west of Purulia. Hazaribagh itself exports both by Giridi and along the Grand Trunk Road. It is difficult to foresee the precise effects of the proposed railway extensions on the trade of the Hazaribagh district, but it may be assumed that the Sitarampore-Nagpore line will deprive Chatra of the export trade which it now attracts from South Lohardugga, Jushpore and part of Sirgoojah; and that the extension of the Patna-Gya line into Palamow will still further curtail the agency business from which the town derives its importance. At present the railway station at Giridi is cut off from the main stream of trade along the Grand Trunk Road by the unbridged Burrakur river, which is impassable for days at a time during the rains, and very destructive to carts even during the dry season on account of the steepness of its rocky banks and the depth of sand in its bed. Carters from Chatra and the marts on the Grand Trunk Road halting at Govindpore, on their way to Raneegunge, have repeatedly assured me that if the Burrakur were bridged they would take their goods to Giridi. We may expect then that, when the recently sanctioned bridge over the Burrakur is completed, the traffic of the Giridi station will show a remarkable increase, while a corresponding diminution will take place in the trade of Raneegunge. The trade of Gola and Pitarbar will, I think, ultimately come on to the Sitarampore-Nagpore line either at Raghunathpore or Purulia. The old Trunk Road, running from Raghunathpore through Chas to Hazaribagh, has recently been repaired in Manbhoom, and promises to serve as an important feeder to the railway. At present it joins the road from Ramgurh through Gola to the village of Mahooar on the Hazaribagh border, but the old line running direct to Hazaribagh is still in existence, and the question of putting it in thorough repair will have to be considered when the railway comes into working.

27. *Lohardugga District.*—The principal seats of trade in Lohardugga district are Garwa, Hosenabad, Daltongunge, and Moharajgunge in the Palamow sub-division; and Ranchee, Lohardugga, Palkot, Lodhma, Biru, Bandu, Tamar and Silli in the headquarters sub-division. Garwa in Palamow forms the distributing trade centre for the surplus produce of great part of Sirgoojah, of the Tributary States further west, and of Palamow subdivision itself. The Garwa market is held during the dry season on the sands of a river, and is one of the largest in the Chota Nagpore Division. Stick-lac, resin, catechu, cocoons of tusar silk, hides, rice, oilseeds, ghee, cotton, and iron are collected there, and at the other Palamow marts mentioned above, for export to Chatra and Gya. Piece-goods, brass vessels, blankets, silk, salt, tobacco,

spices, drugs, and beads are imported from Behar for local consumption, and to supply the stocks of itinerant merchants who take these articles into Sirgoojah and Korea. Nearly all the trade of the head-quarters sub-division flows eastward to the mart of Jhalda in Manbhoom, and thence through Purulia to Bankoora and Raneegunge. The only exceptions to this rule are—

(*i*) A small area in the west of the district roughly marked off on the map by the dotted line drawn from Biru through Palkot to a point about 12 miles east of Lohardugga town, which at present sends its surplus produce by pack-bullocks to Chatra; and

(*ii*) A still smaller area in the south-east which exports through Patcoom to Chandil, and thence by Burrabazar and Manbazar to Bankoora.

28. It appears, however, that as the roads leading eastward are gradually improved and rendered passable for carts, the proportion of the export trade flowing towards Ranchee and Jhalda is even now tending to increase, while the attraction of Chatra shows signs of declining. At present, no doubt, the tendency I speak of is not very conspicuous; but in the ordinary course of events the primitive modes of transport on which the Chatra trade depends are bound to be beaten out of the field by wheeled transport plying along more direct and more convenient routes. Chatra owes its predominance as a trade centre for Western Chota Nagpore to the various causes which have delayed the construction of cart roads in the west and south-west of Lohardugga district. As soon as the system of roads planned for the district is completed, it may be assumed that the entire traffic of the head-quarters sub-division and of the Tributary States, except Chang Bhakar and North Sirgoojah, will flow eastward towards Jhalda. At what points it will strike the new railway is a difficult question to determine beforehand; but I may mention that the Deputy Commissioner of Lohardugga agrees with me in thinking that the trade of the northern portion of the area in question, including the marts of Lohardugga, Ranchee, and Silli will go to Purulia; that the traffic of the south, collected at Palkot and Biru, will come on to the line at Lamgarh and Chakradhurpore, and that the south-eastern corner of the district represented by the mart of Tamar will export by way of Kharsawan or Chandil. As soon as the railway is sanctioned, the District Road Committee will probably set about aligning feeder roads to some of these points.

29. *Singbhoom District.*—The chief marts of Singbhoom district are Chaibassa, Chakradhurpore, Sonua, Kharsawan, Saraikola, and Haldipukar in Singbhoom Proper, and Ghatsila and Bharagora in the outlying pergunnah of Dhalbhoom. Dhalbhoom, which is cut off from the rest of the district by a range of hills traversed only by a single pass, trades with Midnapore. The exports of

the central and western portions of the district are sent, as a rule, to Raneegunge and Bankoora. Produce is also said to be exported to Gya through Ranchee, Tandwa, and Chatra. Most of the district trade is at present in the hands of petty itinerant traders, who move about from village to village during the cold weather purchasing country-produce or taken it in exchange for salt, which they import monthly on pack-bullocks from Ghatal and Midnapore. When the railway is opened, it will probably absorb the whole of the district trade as soon as the local dealers have had time to realize the changed conditions. At first, perhaps, the eastern villages of Dhalbhoom will continue to trade with Ghatal and Midnapore; but when a good road has been made through the Kapargadi pass, and a few more Marwari merchants have settled at Chaibassa, that town will become the main centre of trade for Singbhoom, Keonjhur, and Mohurbhunj.

30. *Manbhoom District.*—The peculiar position of Manbhoom in relation to the trade of Chota Nagpore has been remarked upon above in explaining the routes by which the produce of Lohardugga and part of Hazaribagh reaches the East Indian Railway. Three main lines of export cross the district from west to east—the Grand Trunk Road with *chattis* or roadside marts of Topechansi, Rajgunge, Gobindpore, Nirsa and Chirkunda; the provincial road from Ranchee to Bankoora passing through Jhalda and Purulia; and a southern line, imperfectly defined by any finished roads, which brings produce from the south and south-east of Lohardugga through Chandil, Barabazar, and Manbazar to Bishanpore and Bankoora. From south to north these lines are crossed by the main road from Chaibassa through Purulia to Burrakur, passing the marts of Chandil, Purulia, and Raghunathpore. An incomplete line running from north-west to south-east through Chas and Raghunathpore towards Raneegunge, promises to bring the produce of south-eastern Hazaribagh, and perhaps of a larger area, on to the railway at Raghunathpore. A glance at the annexed trade map will show the positions of the chief marts in Manbhoom and their relations to the existing roads and the new railway. Clearly the traffic along the Trunk Road will not seek the new line. Indeed, by the time the line is open the volume of this traffic will probably have been much reduced by the bridging of the Burrakur river between Dumri and Giridi, so that the portion of the Trunk Road passing through Manbhoom will merely serve the local trade of the Govindpore sub-division, and the large export of coal from the collieries between Nirsa and Burrakur. All the traffic on the other routes described will be carried by the new railway. How far the influence of the line will extend in an easterly direction depends upon causes which it is impossible to analyse here. My own opinion is that after a short period of adjustment, during which new centres of trade will be formed at Chandil, Purulia, and Raghunathpore, the entire trade of Eastern Manbhoom and of the western purgunnahs of Bankoora will be drawn on to the

new line; that is to say, the centres of attraction for trade purposes will move to the west and occupy points on the railway.

31. *Import Trade.*—In describing the trade routes of the division, I have discussed the question almost entirely in terms of export. The import trade follows the same main lines as the export trade, and needs no special description. Places which export to stations on the East Indian Railway procure their imports from the same source, and this holds good equally in the case of the areas exporting to Gya, Mirzapore, and Midnapore.

32. *Attraction of Raneegunge.*—It was remarked above that some of the exports of Chatra and Hazaribagh are sent by cart along the Grand Trunk Road to Burrakur or Raneegunge. The preference for Raneegunge over the two nearest stations on the line is mainly due to the fact that the trade of Raneegunge is incomparably larger than that of either Burrakur or Giridi, and that consignors can count upon disposing of their entire produce to a single wholesale dealer, and getting at once whatever they may require for the return journey. At Burrakur or Giridi, where the machinery of trade is as yet imperfectly developed, a consignor of country-produce would probably have to dispose of his stock in driblets, and to pick up his return load of piece-goods, salt and tobacco from half a dozen different dealers. For this reason, and probably also because the consignors have running accounts with the large merchants at Raneegunge, the majority of carts exporting country-produce travel for their market 70 miles beyond Giridi, their nearest railway station, and 25 miles beyond Burrakur. The point chiefly of importance as illustrating the indifference to delay, and the reluctance to abandon traditional routes and methods which are so characteristic of the ordinary country trader.

33. The articles thus sent are oilseeds, gram, ghee, mohua, molasses, and lac: oilseeds forming about 90 per cent. of the trade. For the most part the carts go direct to Raneegunge, passing within 26 miles of Giridi, and within one mile of Burrakur station. They return to Chatra with salt, piece-goods, brass utensils, pepper, turmeric, and tobacco. While at Raneegunge I asked some of the leading merchants why this considerable body of trade was diverted from Gya, apparently its natural outlet, to so distant a point as Raneegunge. The answer was that oilseeds, the staple export being largely grown in Gya, were sold there in ordinary years at the same price as in Chatra; while at the ordinary rates of cart-hire a profit could be made by sending them to Raneegunge.

34. *Minor trade agencies.*—It is not pretended that the foregoing paragraphs give anything more than a very general outline of the operations of trade over a large province. No reference has been made to the weekly markets held in all large villages, to the small travelling dealers (*bepuá is*), or to the agents of large merchants who settle for a time at convenient centres and buy up the

produce of the neighbourhood. In a country where but few large centres of trade exist, it is from sources such as these that the chief marts shown in the map derive their stocks for export, and the imports are distributed through the same channels. No statistical record of these operations is possible. As Chota Nagpore is gradually opened up by the railway and by improved roads, we may expect that new marts will spring up, and that the trade of the division will tend to concentrate itself, while itinerant dealers, and transport by means of pack-bullocks, will tend to disappear.

35. *Data for estimate of trade.*—I will now examine at length the various data which exist for estimating the probable yearly goods traffic which the Nagpore Railway may count upon carrying from and to places in Chota Nagpore. The first and most obvious source of information is the reports of the district officers, which take the form either of special reports on the trade of the district or of sections devoted to that subject in the General Administration Reports. In most cases the information given is of the vaguest character, and throws very little light even on such an elementary matter as the main lines which the trade follows. In Manbhoom considerable attention has been paid to the question of trade statistics, and for the last three years special reports on the subject have been drawn up by a native officer of great local experience. Some of these figures will be reproduced and examined below. Clearly they have been compiled with great labor, and aim at a higher standard of completeness than those supplied from other districts of the division. They are based almost entirely on the following data:—

District trade reports.

(*a.*) Statements of local traders resident in Purulia as to the quantity or value of the stocks passing through their hands during the year, and the proportion of such stocks drawn from, or exported to, districts other than Manbhoon. Traders from the interior of the district were questioned on these points when they visited Purulia, and in all cases from 30 to 50 per cent. was added by way of correcting the mahajan's natural tendency to understate his stocks.

(*b.*) Estimates made by local traders at the instance of the compiling officer of the quantity or value of particular articles exported from, or imported into, the whole district.

(*c.*) Estimates framed by the compiling officer of the quantity or value of particular articles which the population of the district ought, on an average, to consume.

(*d.*) In some instances the traders' books were referred to.

36. With regard to (*a*) it would be waste of time to dwell upon the various sources of error which such a method of enquiry

involves. Every local trader is possessed with a constant dread of enhanced license-tax, and regards statistical enquiries of any kind with the more suspicion because he is quite incapale of understanding the remote general objects which such enquiries have in view. He may believe that the officer with whom he is talking at the moment has no ulterior designs in respect of taxation ; but nothing would persuade him that incautious disclosures made by him as to the extent of his dealings might not hereafter be used by another officer or another department for the purpose of assessing a new tax or enhancing an old one. The clumsy expedient of adding a uniform percentage to the statements of stock could only yield correct results if every man lied in exactly the same ratio to the truth. In the present case as the mahajans were informed that this correction would be applied, there can be little doubt that many of them made allowance for it in framing their statements. As to (*b*) no one who has seen anything of the mahajan class in Chota Nagpore can have failed to be struck by their peculiar inability to take a general view of any subject. Each man knows his own business, and nothing more, and it is simply preposterous to expect him to be able to estimate the exports or imports of a whole district, which to him represents merely a set of arbitrary boundaries laid down for the convenience of the courts. Least of all would he be able to distinguish local exports and imports from goods in direct or indirect transit to other districts. At the best, moreover, the enquiry was only partial. It is not pretended that all the traders in the district were consulted, and that the figures represent the total of their statements and estimates. On the contrary, the compiling officer admits that he never left Purulia, and that he merely took any opportunity that offered of questioning traders from the interior, who happened to come to the district head-quarters.

36. *ii. Special enquiries from mahajans.*—In January last, I spent several days in Raneegunge in attempting to ascertain from the local merchants, not the actual quantities of goods consigned to them from Chota Nagpore, but the *proportion* of the traffic passing through their hands which come from that part of the country. To ask them, actual quantities would of course have been futile, as even if they had placed their books absolutely at my disposal, it is doubtful whether the necessary particulars would have been on record, and in any case the labour of compilation would have been prohibitory. I hoped, moreover, to disarm their suspicions by abstaining from all enquiries as to the extent of their business and confining my questions to the *percentage* drawn from, or exported to, Chota Nagpore. After visiting every substantial merchant in the town, I gave up the attempt as hopeless for several reasons.

37. In some cases dealers themselves had the vaguest ideas as to the source and destination of their own business ; they did not know which of the Chota Nagpore marts served particular districts, or what extent of country was included in the Chota

Nagpore Division. Though shrewd enough in points of detail as to prices and carriage, they were curiously ignorant as to the general course of trade and the possible changes arising from the extension of railways. Goods came to them because they had always come, and they saw no reasons for anticipating changes. It might be that the opening of the Gya Railway had reduced the trade with Chatra, but they could not say to what extent, or whether the reduction was likely to be permanent. Others affected great readiness to impart information and improvised extravagantly large statistics of the traffic which a glance at the railway figures shewed to be impossible. The Marwaries, among whom are the chief merchants of Raneegunge, took a different line. Their leading man went through the railway statistics with me, and after consulting his countrymen gave me a rough statement of the percentage of each article entered in those returns which was exported from, or imported to, Chota Nagpore. He said, for instance, that 25 per cent. of the piece-goods, salt, flour, betel, and turmeric appearing in the railway returns was intended for Chota Nagpore, and that 18 per cent. of the oil-seeds came from Chota Nagpore. He let out, however, in conversation that, in his opinion a line joining the East Indian Railway at Sitarampore would in a few years ruin the native trade of Raneegunge. All the traders, along the new line of rail who now employ agents in Raneegunge would, he said, deal direct with Calcutta, while men off the line would arrange their business through agents at Purulia, Chyebassa, and other new centres of trade. Raneegunge would cease to be the chief distributing centre for Chota Nagpore, and the men in whose hands the trade is now would either have to accept the loss of a safe and lucrative commission business, or to start afresh in one of the new centres further west. The latter alternative would be hardly less distasteful to them than the former. Large sums have been spent by men of this class on substantial masonry buildings in Raneegunge. Most of them have permanently settled in the place, and do not contemplate returning to their new country. If they are driven to transfer their seats of business to places on the line, they can only do so at a heavy loss. Nor will the new business at any one centre be such as to compensate them for the loss of the old. The effect of the new railway will be to dissipate and distribute among several centres the business hitherto concentrated at Raneegunge. From the tone adopted in discussing the matter by the most influential and intelligent native merchants, I am satisfied that they are, on the whole, opposed to the project for a line to Sitarampore, and that their statements as to the proportions of the existing trade which are concerned with particular localities cannot be regarded as trustworthy. Information derived from them is vitiated by their special bias against the present scheme, as well as by the general prejudices which they share with the rest of their class.

38. *iii. Estimates from population not generally applicable.*—To argue from the recorded population of a district to its probable

ultimate consumption, is no doubt a legitimate process, but it can only be applied with confidence in the case of salt, and perhaps of some staple food-grains. Thus in the case of salt we can say that 17lbs. is the amount required during the year by an adult, and that 12lbs. * is the average annual consumption in India per head of population, and we may infer from this that with improved communications and a low duty the Chota Nagpore Division may be expected to consume, perhaps 700,000 maunds of salt. An attempt has been made by the compiler of the Manbhoom trade reports to calculate the import of European piece-goods on a somewhat similar method. Taking the population of the district at 1,042,117, as recorded in the last census, and deducting 281,174 for children and persons who do not wear European cloth, the remaining 760,943 persons are divided into four classes, spending, respectively Rs. 75-4-1 and 8 annas per head on European cloth during the year. The number of persons in each class is then estimated, and their consumption calculated on the following scale :—

* Note.—This is the standard taken by Sir John Strachey at page 230 of "The Finances and Public Works of India." Mr. Power, the Deputy Commissioner of Lohardugga, has enquired into the subject in that district, and finds that the "average annual consumption, if anything, exceeds Sir John Strachey's standard." The Bengal Trade Report for 1881-82 puts the average consumption per head as follows :—

Bengal.	Orissa.
Behar.	Chota Nagpore.

					Rs.	A.	P.	Rs.
2,000	of the upper class	spending	per annum		75	0	0	1,50,000
200,000	„ middle class	„	„	...	4	0	0	8,00,000
200,000	„ cultivators	„	„	...	1	0	9	2,00,000
358,943	„ poorer classes	„	„	...	0	8	0	1,79,471
7,60,943	persons spend per annum			...			...	13,29,471

Deducting from this Rs. 3,62,000, being the value of twist imported from Calcutta to be made into cloth in the district, the remainder Rs. 9,67,471 is taken as the minimum value "of piece-goods imported from Calcutta for the consumption of the people of Manbhoom." It is not clear why a smaller amount was entered in the figured estimate for 1881-82, and subjected to a further deduction on account of re-exports; but the whole calculation rests upon such highly conjectural data, that it would be waste of time to examine it in detail. Again, the import of salt is calculated on the assumption that 9,99,452 men consume 1 tola a day, or 4·56 seers (say, 9 lbs.) in the year. I have not ascertained why the salt consuming population was taken at this particular figure, which corresponds neither with the total population of the district, nor with the total number of males or heads of families recorded in the last census.

39. A similar form of argument is used by Mr. Parker, in paragraphs 84 to 87 of his report * on the preliminary surveys for the Nagpur Railways, and the annexed statement, and is mentioned in

* No. 584, dated 14th June 1882.

the Bengal Government letter forwarding the report to the Government of India as, on the whole, the most reliable method of estimating the probable receipts of the line. To this I would add that, while Mr. Parker's calculation is probably sound enough as an estimate of the minimum traffic, it must necessarily reproduce the defects of the returns upon which it is based. These returns, I believe, are largely derived from a system of road registration. I have had some experience of road registration in Manbhoom, where it is conducted under fairly favourable conditions, and the stations are so placed as to be open to constant supervision. In my opinion every system of the kind greatly understates the amount of the traffic which it professes to record. The men who keep the registers are ignorant and ill-paid, they do not understand the object of their work, and they take as little trouble over it as possible. Numbers of carts evade the registering station or slip past it during the night, and the carters themselves understate the quantities of goods they are carrying. What the percentage of error may be it is impossible to say precisely, but in many cases, I believe, it to exceed 25 per cent. Of course, it would be a random mode of procedure to add that percentage to Mr. Parker's figures, but if this were done, I believe it would be borne out by the working results of the line.

40. *iv. Statistics of the East Indian Railway.*—I have already explained in paragraph 23 above, that the great bulk of the existing trade of Chotá Nagpore finds its way by various routes to the stations on the East Indian line between Burrakur and Burdwan. In order to ascertain what light the traffic returns of the East Indian Railway would throw upon the prospects of the new line, I obtained from Mr. Bradford Leslie a statement shewing in detail the quantity of each article exported from, and imported into, each of the stations from Burrakur to Burdwan, inclusive, during the year 1882. Taking this statement as a basis, I hoped to be able to ascertain from the chief dealers at each station what proportion of the goods shown in the railway statistics came from, or went, to Chota Nagpore. My experience at Raneegunge showed that it was impossible to separate the Chota Nagpore traffic from the traffic of the area intervening between the proposed new line and the East Indian Railway. Raneegunge was the most promising place for the experiment, as the Chota Nagpore trade goes there direct by cart, and is not filtered through a number of different marts before it reaches the rail. In the case of Panagarh, Mankur, and Burdwan the statistics probably include a certain proportion of Chota Nagpore goods; but these are consigned, in the first instance, to merchants at Bankoora, Bishenpore, Sonamukhi, Krishnagore, and other intermediate marts, and reach the railway as exports from those places, not from Chota Nagpore. At these stations the attempt to trace back any branch of trade to its sources would have been even a greater failure than at Raneegunge. For these reasons the returns of the East Indian Railway are not of very precise statistical value for my present purpose, except in the case of articles produced exclusively

in Chota Nagpore, and of stations like Sitarampore and Burrakur which deal only with that part of the country. They suggest, however, some important inference as to the traffic of the new line, and they serve to illustrate and supplement the defects of the statistics collected by actual registration in Manbhoom district. I shall refer to them largely in discussing the trade of particular articles.

41. *v. Statistics of local registration.*—The registration figures, imperfect though they are, form the only local statistics which can pretend to even approximate accuracy. The system on which they are collected requires some explanation. For the last thirty years or so *serais* or rest-houses for carts and travellers have been kept up at regular intervals along the Grand Trunk Road. In that portion of the road which passes through Manbhoom it has been the practice for many years past to prohibit carters from halting for the night anywhere except in a *serai*. How far this practice is based upon any formal order is a point I have never been able to clear up. Certainly no such order is on official record in the district. But the custom, which dates back to times when the trunk road was unsafe for travellers, is well known and is in the main enforced by the mounted patrol on the road. A fee of one pice is paid for each cart, and the right to collect these fees is farmed out yearly by public auction, the serais, wells, &c. being repaired from the proceeds. In February 1881, while in charge of the Govindpore sub-division, I made arrangements for recording daily the number of carts passing through the *serai* at Govindpore on the Grand Trunk Road, with the starting place and destination of each cart, and the quantity of goods carried. The system was carefully supervised, and the figures are believed to be substantially correct. They certainly do not exaggerate the traffic, as it was to the interest of the farmer of the *serai*, by whom the register was kept, to understate the number of carts, and thus reduce the apparent profit on his lease. On the other hand, the conformation of the country at Govindpore renders it impossible for carters to evade the *serai* by going off the road, while the patrol system prevents them from halting at intermediate points, and passing the *serai* during the night, perhaps 10 or 15 per cent. might be added to make up for carts which escaped registration, or were purposely omitted by the farmer; but, on the whole, the conditions are so favourable to correct registration, that it is doubtful whether any correction need be applied. In August 1881, before leaving for Hazaribagh, I compiled the statistics thus collected for the six months from February to July 1881 inclusive, and submitted a report on the subject to the district officer, suggesting the introduction of a system by which it was hoped that the whole of the traffic likely to be carried by the proposed railway (southern route) might be registered at certain points in the Manbhoom District by a salaried agency, such as is employed to record the trade on the roads leading into Calcutta. Nothing was paid to the farmer of the *serai* at Govindpore. He was merely supplied with paper and told to record certain particulars, it being further understood that the totals were made up for my information only

and were not to be made use of at the yearly auction of *serais*. The proposal was recommended by the late Deputy Commissioner to the Commissioner of the Division, but it was lost sight of in consequence of Mr. Hewitt's absence on leave. In October 1881, a new sub-divisional officer stopped the registration of traffic at Govindpore. On my return to Manbhoom, in April 1882, I moved the Deputy Commissioner to start registration in the head-quarters sub-division on the Govindpore unpaid system; and since June 1882 traffic has been recorded at the *serais* at Govindpore, Purulia, and Nadiara. These points are marked with red flags on the map.

42. If the system had worked at head-quarters as well as it did at Govindpore, the returns from Nadiara on the direct road from Ranchee to Bankoora, Raneegunge and Burrakur would have shown approximately the whole of the trade with Jhalda, Ranchee and other centres farther west, while the Purulia station would have recorded the trade of southern Manbhoom and of all Singhbhoom except the area which deals with Midnapore. Experience, however, has shown that of the Singbhoom trade a large portion evades the Purulia *serai* by taking advantage of a cross road skirting the south of the town, and joining the main road to Bankoora, some two miles to the east of the *serai*. Considerable quantities of goods from Singhbhoom are consigned to merchants at Chandil, and find their way to Bankoora by a rough tract through Burrabazar and Manbazar; some are consigned to merchants at Purulia and are never registered at all, as the carts have no occasion to use the *serai*. Moreover, *serais* have only been introduced into the head-quarters sub-division within the last two or three years; the carters do not see the advantages of them, and prefer camping out under trees; they will even make a considerable detour to avoid paying the fees, and in this part of the district we have neither ancient custom nor a regular road patrol to enforce the order that carters must halt at night in a *serai*. It would be out of place to discuss in this report the policy of putting pressure on the cartmen to induce them to use the *serais*; but I may mention that I made enquiries on the subject in Raneegunge, and found that the leading merchants there not only approved of the system, but had so far recognised it as to admit charges for *serai* fees as part of the standard cart hire from Raneegunge to Raghunathpore and places further west.

43. It follows from what has been said in the last paragraph that the percentage to be added to correct understatements in the Purulia and Nadiara figures is much larger than in the case of the statistics collected at Govindpore. I would estimate it at from 40 to 50 per cent. in the case of Purulia, where several sources of error effect the total, and at about 25 per cent. in the case of Nadiara where the routes available for evading the *serai* are fewer, and we have only the novelty of the system to look to. In dealing with the trade in particular articles, I have in every case shown the actual figures, and have not attempted to correct them by adding a conjectural percentage.

44. In the following paragraphs the statistics, such as they are, derived from the railway returns and the records of local registration, are reproduced and compared, and an attempt is made to estimate approximately the quantity of each article which the proposed railway may be called upon to carry. From the nature of the case only an approximate estimate is possible. I have endeavoured, however, to bring together under the head of each article all general information that has any bearing upon its distribution in, and thus to supplement as far as possible, statistical defects. For convenience of reference I have followed the alphabetical arrangement of the railway returns:—

Imports.

45. *Beer.*—During 1882, the net imports of beer, other than Commissariat beer, into the stations from Burdwan to Burrakur inclusive, amounted to 2,075 maunds. The largest quantities were to—

	Mds.		Mds.
Burdwan	341	Assensole	960
Raneegunge ...	372	Burrakur	321

probably no portion of the imports of Burdwan or Assensole passed on to Chota Nagpore. At both places there is a large European community, and the imports shown in the returns may be taken to have been consumed locally. At Raneegunge the European community is now very small, owing to the transfer of all railway servants to Assensole. Lohardugga and Singhbhoom get their supplies from Raneegunge, while Manbhoom for the most part imports through Burrakur. Having regard to the numbers of the Europeans in the three districts, the imports of beer may be taken, on a moderate estimate, at from 300 to 400 maunds a year. Beer is not separately shown in the statistics of trade registration. It comes up in boxes, of which neither the cartmen nor the *serai* farmers would know the contents.

46. *Betel-nuts and leaves.*—The Railway figures show the following net imports for 1882:—

	Mds.		Mds.
Burdwan	2,351	Sitarampore ...	576
Panaghur	380	Burrakur ...	599
Durgapore ...	81		
Ondal	4		16,649
Raneegunge ..	11,874		
Assensole	784		

Pán (piper betel) and *supári* (areca catechu) are hardly grown at all in Chota Nagpore, the climate being too dry for either to flourish. Consequently the entire province, except the areas dealing with Gya, Giridi and Midnapore, draws its supplies of this indispensable

luxury from Bengal proper. All natives agree in describing the consumption as very large. We know that numerous quantities of betel are grown in Bankoora and Burdwan, and in view of this fact it would hardly be unfair to assume that these districts produce enough to supply themselves, and that the railway imports represent the amount sent westward to meet the demand from Chota Nagpore. It is possible that this may understate the case, and that Chota Nagpore not only takes off the entire surplus of Burdwan and Bankoora, but imports through the East Indian Railway besides. The Raneegunge dealers, whom I consulted on the point, thought that one-fourth of the imports by rail into Raneegunge passed on into Chota Nagpore, but their bias against the line was so pronounced, and their incapacity to deal with large estimates so apparent, that I attach little importance to their opinion. On the whole, I think 8,000 maunds would be a reasonable estimate of the amount the railway will carry during the year. Under the head of betel the road registration returns shew for the last seven months of 1882—

153	maunds registered at Purulia.
28	„ „ at Nadiara.
153	

or a yearly average of 252 maunds. This does not necessarily affect the correctness of the rough estimate given above. Both *pán* and *supári* are usually brought up in the same carts with salt, but only the salt which makes up the chief part of each load is declared by the cartmen, while the *pán* and *supári* escape registration.

47. *Blankets, Country.*—The Railway imports are—

	Mds.		Mds.
Burdwan	41	Sitarampore ...	64
Kanoo	42	Burrakur ...	430
Panaghur	27		
Raneegunge ..	395	Total	1,095
Assensole	96		

The whole of the imports of Sitarampore and Burrakur, and 200 maunds out of the imports of Raneegunge, may be taken to represent the Chota Nagpore demand—in round numbers 700 maunds. There is a large and steady demand for blankets in Chota Nagpore. On the plateaux of Hazaribagh and Ranchee the cold is intense in winter, and a large supply of blankets is required every year for coolies migrating to Assam.

48. *Brass and brass-ware*—are imported from Raneegunge and Bankoora. The Chota Nagpore braziers do not make enough for local wants, and their workmanship is clumsy. A good deal of brass is imported to be worked up locally into the massive ornaments

worn by women of the aboriginal races. The Railway figures for 1882 show the following net imports:—

		Mds.	
Burdwan	... ...	103	
Kanoo ...	... ...	886	
Mankar	... ...	3	
Panaghur	... ...	587	Supplying Bankoora.
Durgapore	... ...	1,008	
Raneegunge	... ...	456	
Burrakur	... ...	538	
	Total ...	3,582	

Local registration shows 197 maunds at Purulia and 566 at Nadiara for the last seven months of 1882, or an average of 1,308 for a year. Comparing the two sets of figures, and allowing for the large omissions in registration at Purulia, arising from the causes explained in paragraph 42 above, I think 2,000 maunds may be taken as a minimum estimate of a year's imports.

48½. *Cotton and yarn.*—Under this head the Railway figures amount to 30,945 maunds, of which Raneegunge contributes 12,645 and Burrakur 10,065, while the local registration returns show—

	Mds.
At Purulia	3,475
At Nadiara	661
Total ...	4,136

or an average yearly import of 6,440 maunds. With regard to the latter figures, it must be remembered that Raghunathpore and Chasnanda, the two chief centres of the local weaving trade, take up large quantities of thread which never reach the registration stations at all. Taking this fact into account, and particularly having regard to the large import into Burrakur which supplies Chota Nagpore, I would estimate the imports of cotton and yarn at about 12,000 maunds in the year. The quantities registered locally came from Burrakur, Raneegunge and Bankoora, and were destined for Purulia, Jhalda, Chaibassa, and two small in marts Manbhoom, which are not shown on the map.

49. *Grain, oats.*—During 1882, 14,850 maunds of oats were imported into Burrakur. It is said to be ground up with gram and Indian-corn into a peculiar kind of *suttoo*. Most of the import of oats went to Jhalda.

50. *Grain, wheat.*—The railway returns show a net import into Raneegunge of 28,271 maunds of wheat during 1882, and of 120 maunds into Burrakur. Wheat is not very much grown in Chota Nagpore, as it requires irrigation and more care than the average cultivator is willing to bestow upon any crop. The average import may be taken at 10,000 maunds.

51. *Other grains and pulses.*—Under this head the railway figures show net imports amounting to 2,99,354 maunds distributed among the following stations:—

	Mds.		Mds.
Burdwan	1,26,451	Assensole	4,662
Kanoo	263	Sitarampore ...	4,151
Mankar	3,400	Burrakur	20,661
Panaghur	10,107		
Durgapore	2,347	Total ..	2,99,354
Ondal	14		
Raneegunge ...	1,27,098		

It is impossible to analyse these figures. At Burrakur I was told that *khesari, musari, kalai* and peas were included under the head of "Others." In 1881-82 the import of grain into Manbhoom was estimated at 8,000 maunds. Large quantities are also sent to Singbhoom and Lohardugga. Only 948 maunds, equivalent to a yearly average of 1,620 maunds, were registered locally. All of this was consigned to places in Manbhoom. Arguing from the railway figures, it seems probable that the 25,000 maunds imported into Burrakur and Sitarampore were destined for Chota Nagpore, but no more definite conclusion than this can be drawn from the materials as they stand.

52. *Gunny-bags.*—The railway statistics give a net import of 6,949 maunds, of which—

	Mds.
Raneegunge took	1,931
Sitarampore	484
Burrakar	364
Total ...	2,779

Only 60 maunds were registered locally, all for Jhalda. Doubtless there is a steady demand for gunny-bags for use in the export trade, but no reliance can be placed on any estimate of quantities. It deserves notice that the large traffic carried by pack-bullocks depends entirely upon gunny-bags. There are several devices for carting grain, stick-lac, tasar, cocoons, &c., in bulk, but the couple of maunds or so which form a bullock's load must be packed in bags, and the bags must be equal to standing a considerable strain and much knocking about.

53. *Jaggre and Molasses.*—The net imports by rail were:—

	Mds.		Mds.
Burdwan	2,053	Raneegunge ...	23,808
Mankur	255	Assensole	129
Panaghur	989	Sitarampore	83
Durgapore	88	Burrakur	669
Ondal	49		
Toposi	15	Total ...	28,585

The local returns show 784 maunds registered in seven months, being an average annual import of 1,344 maunds. Sugarcane cultivation is very backward in Chota Nagpore. Inferior kinds of cane are grown; manure is very sparingly used, and the methods of extracting the juice are primitive and wasteful. These facts may serve to explain the large imports of jaggre and molasses into Raneegunge, a place which clearly does not require 23,000 maunds for local consumption. I would estimate the Chota Nagpore demand at about 15,000 maunds in the year.

54. *Oil in barrels, cases and skins.*—Under this head, which includes kerosine-oil, the railway returns show a net import of 16,246 maunds, Raneegunge taking 5,697, Assensole 1,910, Sitarampore 1,263, and Burrakur 207. Thus the import of the stations which ordinarily supply Chota Nagpore comes to 9,077 maunds. Only 185 maunds were registered locally. Kerosine-oil is widely known and much used all over the division, not only for lighting purposes but for outward application in diseases affecting the skin. On the data, as they stand, 5,000 maunds might be taken as a rough estimate of the annual imports of oil, but the estimate would have no statistical value. We can only say that both kerosine and cocoanut oils are imported from Bengal, and that the import will certainly increase largely when the railway is opened.

55. *Oil-cake.*—The same remarks apply to oil-cake. A small import of 284 maunds was registered, while the railway figures give a total of 68,070 maunds, of which—

	Mds.
Raneegunge took	31,224
Sitarampore...	1,760
Burrakur	2,136
Total ...	35,120

Here again, no estimate is possible, but it is tolerably certain that a large portion of the imports of these three stations found its way to Chota Nagpore.

56. *Paper.*—The railway figures show net imports of 733 maunds to Burdwan, 28 to Panaghur, and 246 to Raneegunge—in all 1,007 maunds during 1882. For the official year 1881-82 the value of the imports of paper into Manbhoom district was estimated at Rs. 10,000. No estimate of quantities can be framed. So far as I can ascertain, paper is not manufactured locally.

57. *Piece-goods.*—Under this important head the net imports for 1882, according to the railway returns, were as follow:—

	Mds.		Mds.
Burdwan	14,118	Raneegunge	20,441
Kanoo	55	Assensole	516
Mankar	720	Sitarampore	154
Panaghur	3,925	Burrakur	22,587
Rajbandh	24		
Durgapore	283	Total ...	62,823

During the last seven months of 1882 there were registered in Manbhoom—

At Govindpore	433 maunds	for Chatra and Ranchi,
At Purulia	3,036 „	for Purulia and Jhalda,
At Nadiara	4,164 „	for Jhalda and Ranchi,

giving a yearly average import of 13,000 maunds. Comparing the two sets of figures, and having regard to the fact that the imports of Singbhoom seem to have escaped registration, I should estimate the Chota Nagpore imports of piece-goods at 30,000 maunds. This estimate is, I think, borne out by the large imports into Raneegunge and Burrakur. Roughly speaking, the whole of the Burrakur imports go to Chota Nagpore, and in this case I should assume that half of the Raneegunge import finds its way to this division. I have not attempted to account for any portion of the imports of Burdwan and Panaghur, but there can be no doubt that some of these goods come into Chota Nagpore through Sonamukhi, Bisenpore, and Bankoora. The consumption of European piece-goods has increased greatly of late years among the aboriginal and semi-aboriginal races of the division. In particular, the exports from Lohardugga to the Tributary States are said to be developing rapidly, but as they enter and leave the district at numberless points no accurate account of the quantity can be kept. It is extremely difficult to register trade carried on pack-bullocks, as the drivers can leave the road at will to avoid the annoyance of being stopped and questioned about their loads.

58. *Potatoes.*—The Railway returns show net imports amounting to 21,167 maunds during 1882, of which

	Mds.		Mds.
Raneegunge took	13,247	Burrakur	2,306
Assensole	2,363		
Sitarampore... ...	550	Total ...	18,466

Only 63 maunds were registered at Purulia as imported from Bankoora and Raneegunge, but this very much understates the facts. Potatoes are very little grown in Chota Nagpore, and the existing imports, whatever their amount may be, will increase enormously directly the Railway is opened. Perhaps 8,000 maunds may be taken as a conjectural estimate of the demand.

59. *Salt.*—The Railway statistics give the net imports for 1882 as follows:—

	Mds.		Mds.
Burdwan ...	82,192	Assensole ...	2,950
Mankar ...	7,684	Sitarampore ...	2,486
Panaghur ...	19,941	Burrakur ...	73,511
Durgapore ...	3,839		
Raneegunge ...	2,51,994	Total ...	4,44,597

Local registration yields the following results :—

			Mds.
Govindopore	...	...	33,975
Purulia	...	...	10,375
Nadiara	...	...	27,796

representing an average annual import of 1,23,528 maunds. Of the quantity registered at Govindpore 22,116 maunds were destined for Chatra, the remainder being consigned to Rajgunge, Topechansi, Dumri, Bogodor, Atka, Bárkáta, Burhee and Chauparun, all marts on the Grand Trunk Road. The chief sources of supply were : Raneegunge (30,101), Burrakur (2,336), Burdwan (1,280). The Purulia returns include 6,043 maunds for Purulia, 1,470 for Balarampore, 849 for Sirkabad, 418 for Chaibasa, and smaller amounts for Jhalda Chandil, and Ranchee. Burrakur supplied 4,924 maunds, Raneegunge 2,539, Bankura 1,840, and Mejha 875. Out of the quantity registered at Nadiara 19,910 maunds were for Jhalda, 6,305 for Ranchee, 784 for Toolin, and smaller amounts for Bagmundi and Jaipore in Manbhoom, and Bundu and Tamar in Lohardugga. The supply was drawn from Raneegunge (18,264), Burrakur (2,579), Bankura (2,224), Krishnagore (1,909), Sonamuki (1,348), and Mejha (402).

60. On the face of the returns it is clear that, for the reasons explained in paragraph 42 above, the salt supply of Singbhoom has escaped registration. If Chaibasa imported so much as 418 maunds by this route, it is morally certain that much more must have been imported. The point, however, is not very material. In order to estimate the demand for salt after the Railway is open, we may assume that the line will supply Manbhoom, Singbhoom, the headquarters sub-division of Lohardugga, the south eastern corner of Hazaribagh, and the Tributary States of Bonai, Gangpur, Udaipur, and Jaspur. It will probably supply parts of Sirgoojah and Korea as well, but I have left these out of account as a set-off to possible over-estimates in the area already assumed. Now the population of the tract I have described, according to the last census, is, as nearly as I can calculate, 3,174,444. Taking the average annual consumption per head at 12lbs. as given by Sir John Strachey, the total yearly demand will be in round numbers 2,38,000 maunds, the whole of which will have to be carried for varying distances by the new Railway.

61. *Spices.*—The net import according to the Railway returns is 17,066 maunds including 14,140 maunds to Burdwan, 1,545 to Raneegunge, and 1,069 to Burrakur. Local statistics show a total of 754 or an average annual import of 1,284 maunds. Probably 1,500 maunds may prove a fair estimate.

62. *Sugar.*—A total import of 2,787 maunds appears in the Railway returns, including 1,366 maunds to Raneegunge, 681 to Assensole, and 25 to Burrakur. The local statistics show 219 maunds. All for Purulia and Chaibasa. Probably 500 maunds would be a fair estimate of the normal demand.

63. *Tamarind*.—The Railway returns give a net import of 881 maunds, 241 to Raneegunge and 23 to Burrakur. Tamarind is not shown in the local statistics, and has probably been included under the head of spices.

64. *Tabacco*.—The total net imports of tobacco according to the Railway figures is 87,745 maunds distributed as follows:—

	Mds.		Mds.
Burdwan ...	47,482	Assensole ...	549
Kanoor ...	11	Sitarampore ...	436
Mankor ...	443	Burrakur ...	15,886
Panaghur ...	287		
Rjabandh ...	82		87,475
Durgapore ...	170		
Raneegunge ...	22,350		

The registration returns of Manbhoom show 2,195 maunds (giving a yearly average of 3,756 maunds) chiefly for Purulia and Jhalda. Considering how little tobacco is grown in Chota Nagpore, the annual imports cannot well be less than 30,000 maunds, and we may assume that the railway will carry at least this amount.

65. *Turmeric*.—Net import according to Railway figures 9,109 maunds. Including 5,290 to Raneegunge and 3,065 to Burrakur. Registered locally 1,257 maunds, or a yearly average of 2,148 maunds. These imports went to Purulia, Jhalda, and Ranchee. probably 5,000 maunds may be taken as the normal average imports.

66. *Wines and spirits*.—Net imports by Railway 1,802 maunds including 299 to Raneegunge, 810 to Assensole, 13 to Sitarampore, and 20 to Burrakur. Only 24 cases shewn separately in local returns, the rest being included in the items "boxes" and "miscellaneous."

Exports.

67. *Babooi string*.—This string, made from jungle grass, is not separately recorded in the Railway returns. The trade is believed to be increasing. Large quantities of *babooi* pass through Purulia from Singbhoom, and the article is in great demand in Bankoora and Burdwan for use in thatching. During the seven months from June to December 1882, 585 maunds were registered at Nadiara and Purulia. Most of this came from Jhalda, and the Singbhoom exports appear to have escaped registration. I have ascertained by special enquiries that between the 20th November 1882 and the 19th March 1883, 478 maunds of this article passed through Chandil from Singbhoom. Much of the trade is carried on *sagars*, or block-wheeled carts, and on pack-bullocks or ponies. It is therefore peculiarly difficult to register, as *sagars* can go almost anywhere, and their owners, as a rule, dislike the *serais*. In the district trade reports already referred to, the exports of this article from Manbhoom alone were estimated as follows:—

	Mds.
In 1879-80	10,000
„ 1880-81	20,000
„ 1881-82	40,000

These figures are admittedly conjectural; but having regard to the peculiar conditions under which *babooi* string is exported, and the known defects of our system of registration, I believe the railway may count upon carrying between 10,000 and 20,000 maunds of this string during the year. Of course the estimate is not based upon any statistics, but I have myself seen such large quantities of *babooi* passing along the roads, that I am sure the registration returns give no idea of the magnitude of the trade.

68. *Coal.*—The Railway returns shew a large export of coal from Burrakur and Sitarampore. Most of this comes from collieries close to Burrakur, and will not affect the new line. Some coal will probably be carried on the section of the line between the Damoodar river and Sitarampore, but the statistics available do not enable me to say how much, as there are no separate returns for the collieries lying near this section. In paragraph 8 above, I have made some general remarks on the possible development of the Jheria and Hinger fields. No estimate can be framed of the quantity of coal which those fields might throw upon the railway. It would probably be very large. In a note upon the prospects of a railway through Lohardugga and Sirgoojah to the Central Provinces the Commissioner of Chota Nagpore has laid some stress upon the importance of encouraging the use of coal for cooking purposes by the people of India. Wood fuel is known to be getting dearer almost yearly; the clearing of jungle progresses rapidly, and the operations of the Forest Department, for preventing and remedying the effects of wasteful management, cannot be expected to produce any tangible result for years to come. If the people themselves could be induced so far to modify their habits as to use coal for cooking, not only would the incessant clearing of jungle, with its evil effects on the rainfall and on the moisture of the soil, be put a stop to, but there might be some prospect of the manure, which is now used for fuel, being put upon the land. While in Raneegunge, in January last, I ascertained that coke is very largely used there for domestic purposes. Every man who works in the coal mines gets a basket or two of small coal given him free of charge, and most of the miners are reported to help themselves liberally into the bargain. This coal is made into coke and used for cooking. Again in the east of Govindpore sub-division there are a number of small coal pits under native management, which export coke to Hooghly and Howrah, where it is sold by retail for cooking. These no doubt are only small beginnings among people who are accustomed to see coal in continual use, who feel the pressure of the high price of wood, and who, as a rule, are not in a position to supply themselves with cow-dung fuel. But the fact that a beginning has been made in a matter where native prejudices are peculiarly strong seems to point to an almost indefinite expansion of coal traffic, directly railways have opened up fresh supplies of coal and made it worth the while of producers to work for the native retail demand. Even now I believe much might be done in the way of popularising the use of coal if the matter could be brought to the notice of natives in some practical way.

69. *Dye-woods.*—Both Hazareebagh and Lohardugga produce excellent indigenous dyes which are used in the manufacture of carpets carried on the Hazareebagh Jail. A list of the Lohardugga dyes is given at pages 349-50 of my statistical account of Lohardugga district, forming Volume XVI of Dr. Hunter's Statistical account of Bengal. The trade may be expected to develop when the railway is opened, but no estimate of the probable exports can be framed.

70. *Grain. Rice.*—The Railway returns for 1882 shew the following net exports:—

Burdwan	...	5,85,684	Raneegunge	...	5,91,574
Kanoo	...	41,496	Assensole	...	1,651
Mankor	...	39,879	Sitarampore	...	9,026
Panaghur	...	4,572	Burrakur	...	41,417
Rajbandhi	...	441			
Durgapore	...	34,007	Total	...	13,49,791
Ondal	...	44			

Only 4,098 maunds were registered locally, mostly from Purulia and Jhaldah, showing a yearly average export of 7,020 maunds. The large rice trade from Singbhoom appears to have escaped registration altogether. I have ascertained that 3,000 maunds passed through Chandil between November 1882 and March 1883, destined for Raneegunge and Burrakur. In the District Trade Report for 1881-82 the export of rice from Manbhoom only was estimated at 20,000 maunds in 1879-80, and 10,000 maunds in, 1880-81. In 1881-82 exportation was said to have stopped owing to the reduced demand consequent on good harvests in Bengal proper; and the local surplus was believed to have been stored, awaiting a rise of prices. The district officer, on the other hand, doubted the existence of any considerable surplus, thinking that most of the rice exported from Manbhoom came really from Singbhoom. The registration returns show that rice is exported from Manbhoom, but I think they materially understate the quantity. The existence of a large export from Singbhoom is generally admitted. I would estimate the normal exports of both districts at 50,000 maunds; but I anticipate a large increase when the railway is open.

71. *Hides.*—The exports of hides according to the Railway statistics are:—

Burdwan	...	14,386	Assensole	...	601
Kanoo	...	225	Sitarampore	...	593
Panaghur	...	191	Burrakur	...	1,181
Durgapore	...	16			
Raneegunge	...	30,555	Total	...	47,748

The local figures show 9,980 *hides* (not maunds) registered at Purulia, and 33,289 at Nadiara, being a yearly average of 74,172 hides, or, taking six hides to a maund of 12,000 maunds. This, however, does not fairly represent the trade of the division. While at Raneegunge in January last I saw some of the leading hide merchants there, and their statements, though statistically indefinite,

went to show that a large proportion of the Raneegunge exports is derived from Chota Nagpore. On a comparison of the railway figures with the registration returns, and paying due regard to the magnitude of the trade, I would estimate the quantity of hides to be carried by the new railway at from 25,000 to 30,000 maunds.

72. *Horns.*—Net exports, according to railway figures, 1,764 maunds, 1,386 from Raneegunge, and 320 from Burrakur. None registered locally. The export in 1881-82 was estimated at 1,000 maunds in the District Trade Report.

73. *Hurrah or myrobolans.*—The railway figures show an export of 7,344 maunds, of which 7,235 are from Raneegunge, the rest being divided between Burdwan, Panagurh, and Mancoor. Only 108 maunds, destined for Bankoora, were registered locally. The trade, however, is known to be large. The tree *(Terminsha chebula)* which yields myrobolans, grows almost exclusively in Chota Nagpore, and it may safely be inferred that the whole of the export shown in the railway returns came originally from the districts of this division.

74. *Lac, including lac-dye, shellac, stick-lac, and refuse.*—Net exports, according to railway statistics, 103,181 maunds, divided among the stations as follows :—

	Mds.
Burdwan	141
Mancoor	985
Panaghur	23,033
Raneegunge	27,348
Burrakur	48,034
Total ...	99,541

The local registration returns shew—

	Mds.
Govindpore	4,088
Purulia	7,689
Nadiara	24,132
Total ...	35,909

for seven months representing an average annual export of 61,548 maunds. There is, however, good reason for believing that the local registration understates the magnitude of the trade. The lac factories at Nirsha Chas and Raghunathpore lie outside the circle commanded by the registering stations, and their exports have not been recorded. Again, very little stick-lac is grown in Burdwan and Bankoora. Shellac, it is true, is manufactured in large quantities, but the raw material is drawn from Chota Nagpore. It may be assumed, therefore, that the whole of the railway exports—in round numbers 1,00,000 maunds—come in one shape, or other from Chota Nagpore, and that this quantity will be carried by the new railway for varying distances.

75. *Lime.*—The exports of lime from Burrakur during 1882 amounted to 2,34,366 maunds, all of which come from places in Govindpore to the west of the Burrakur river. In the villages along

the Grand Trunk Road between Nirsha and Chirkoonda, there are large surface deposits of *ghooting* or nodular limestone, which are worked for lime. It will be seen from the annexed map that Ritter von Schwarz, Superintendent of the Government Experimental Ironworks at Burrakur, has discovered numerous deposits of pure limestone on the south of the Pachete hill. When the railway is open, these qarries will be able to undersell the small Govindpore quarries mentioned above. They will be closer to the rail, and they will send their produce direct to Sitarampore. Assuming the demand to remain the same—and it would probably increase—the railway might count upon carrying, say, 3,00,000 maunds of lime a year from near the Pachete hill to the Sitarampore station. Again, if the Burrakur Ironworks are started on a large scale, I understand they will require 75,000 tons of limestone a year to supply one large and two blastfurnaces, or 120,000 tons for two large and two small furnaces, as has been recommended by Ritter von Schwarz. The whole or a large portion of this would be carried by the railway, though only for a short distance. The railway would also carry all iron manufactured by the Burrakur works which may be sent westward. The demand of the Central Provinces is estimated officially at 15,000 tons a year.

76. *Seeds, including mustard, surgooja, and other oil-seeds.*—The Railway returns shew the following statistics:—

Stations.	Exports.	Imports.
Burdwan	3,176	1,74,472
Kanoo	.....	.....
Mankoor	164	26,090
Panaghur	7	6,633
Rajbandh	.....	35
Durgapore	102	2,311
Raneegunge	56,696	58,724
Assensole	.....	1,876
Sitarampore	14	327
Burrakur	.....	5,217
Total ...	60,159	2,75,685

Local registration gives the following results:—

Govindpore	32,483
Nadiara	30,979
Total ...	63,462

or a yearly average export of 1,08,792 maunds. Most of the exports registered at Govindpore were from Chatra, Bagodar, Burhi, and other marts in Hazaribagh ; their destinations being Raneegunge, Burrakur and Burdwan. The exports through Nadiara were mostly from Jhalda for Raneegunge, Bankoora and Sonamookhe. It must be admitted that the figures quoted above are rather puzzling. Oil-seeds are the chief and most conspicuous export of Chota Nagpore.

One sees enormous quantities of them on every road during the cold weather, and, as pack-bullocks are largely employed to carry them, it may be assumed that a considerable proportion of the export escapes registration. Taking the registration figures as they stand without making any allowance for omissions, and merely correcting them so as to represent a full year's export, it will be seen that nearly 50,000 maunds do not reach the East Indian Railway at all. On the other hand, the railway figures shew an enormous importation of oil-seeds into Burdwan and Bankoora, from which we may infer that these districts grow oil-seeds comparatively little and require large quantities of oil. The amount, then, by which the local figures exceed the railway statistics, represents the consumption of the tract of country lying between the registration stations and the East Indian Railway. The cultivation of oil-seeds will probably extend itself remarkably when the railway is opened. It is a kind of cultivation which gives little trouble, and which the people understand. No irrigation is needed, and I have seen excellent crops grown between the stumps on land recently cleared from jungle. Within a few years the railway may count upon carrying some 5,00,000 maunds yearly.

77. *Tea.*—The Railway figures shew an export of 3,273 maunds, all from Lohardugga and Hazaribagh. In 1880-81 there were thirty-six tea-plantations in these two districts. The industry can hardly be described as remarkably flourishing, but it has the great advantage of cheap labour, and is not likely to die out until the local rates of wages and system of hiring labour undergo some more material changes than can be foreseen at present.

78. *Timber.*—The Railway returns shew a slight preponderance of imports over exports, and thus throw no light upon the Chota Nagpore trade. The local registration figures give a total of 11,542 sleepers, registered thus :—

At Govindpore	...	..	..	8,106
„ Purulia	...	..	..	547
„ Nadiara	...	..	...	2,889

Besides sleepers, there is also a considerable export of *rollahs* (sâl saplings) to Burdwan and Bankoora, where they are used for house-posts, rafters, &c. The large demand for these young trees probably does more harm to the forests than that for heavy timber which can only be cut from mature trees. It would be useless to attempt to speculate upon the timber trade that may be carried by the new line. Sources of supply hitherto untouched will be opened up, but the extent to which these will be drawn upon depends upon factors at present unknown—such as the extension of railways, the system of forest conservancy introduced in zemindari forests, the cost at which iron sleepers can be made, and the like.

79. *Tasar silk cocoons*—are exported to Bankoora, Burdwan, Beerbhoom and Azimgarh in the North-West Provinces. The

exports for the three years ending 31st March 1882 were estimated as follows in the district trade report already referred to :—

1879-80	.. ..	30,000 Kahans of 1,280 cocoons each.
1880-81	.. ..	15,000 "
1881-82	.. ..	7,500 "

No reliance, however, can be placed on these figures, nor is there any reason for believing that the exports declined during this period so remarkably as the estimate would shew. Some special registration started by me in Chandil in November last as a sort of rough check upon the returns given by the *serai* farmer in Purulia shews that 4,077 *kahans* of cocoons passed through the Chandil market between the 20th November 1882 and the 19th March 1883. Cocoons are very light and take up much space in proportion to their weight, so that the trade would n ot be very important to the railway.

80. *Summary.*—For the sake of comparison the estimates of the trade in particular articles, attempted in the foregoing paragraphs, are collected and re-stated below in a tabular form. This mode of statement brings out clearly enough the fragmentary and imperfect character of the estimates. No one who possesses a fair general knowledge of Chota Nagpore, and has watched the trade which passes along the main roads will accept my estimate of imports as fairly representing the true demand. At the same time it is difficult to see how the quantities can be materially raised without putting the existing data altogether aside and framing an estimate by mere guesswork. No attempt has been made here to anticipate the enormous extension of the import trade which will follow upon the opening of the railway. At present Chota Nagpore is in a primitive stage of economic development. The price of almost all articles, excepting, perhaps, salt, is determined more by custom than by competition, and everywhere the tendency is for a small ring of mohajans to frustrate or minimize the operation of pure economic causes by manipulating this customary price in accordance with their own interests. Within the last two years several public markets have been opened in Manbhoom, and the determined opposition offered to these by small cliques of petty dealers has shewn very clearly how the country stands in need of the wholesome competition which a railway is likely to introduce.

Imports.	Mds.	*Exports.*	Mds.
Beer	400	Grass and baboi string	20,000
Betel-nuts ...	8,000	Coal ...	.....
Blankets	700	Dye-woods ...	.....
Brass and brassware	2,000	Grain-rice ...	50,000
Cotton and yarn ...	12,000	Hides ...	30,000
Grain, oats	14,000	Horns ...	1,000
Wheat	10,000	Hurrah or myrabolams	8,000
Other grains and pulses	25,000	Iron ...	.....
Gunny-bags	2,000	Lac ...	1,00,000

Imports.—(Continued.)	Mds.
Jaggree and molasses	15,000
Miscellaneous, including oilmen's stores, furniture, umbrellas &c.	10,000
Oil	5,000
Oil-cake	10,000
Paper	500
Piece-goods ...	30,000
Potatoes	8,000
Salt	2,38,000
Spices	1,500
Sugar	500
Tamarind	200
Tobacco	30,000
Turmeric	5,000
Wines and spirits ...	500
Total ...	4,28,300

Exports.—(Continued.)	Mds.
Lime ...	3,00,000
Limestone ...	.....
Seeds ...	5,00,000
Tea ...	3,000
Timber ...	10,000
Tassar-cocoons ...	.....
Total ...	10,22,000

81. It will be seen that under the head of exports no attempt has been made to estimate the quantities of coal, dye-woods, iron, limestone, and tassar-cocoons which the railway may be called upon to carry. The possible development of rival coal fields, the success of the Burrakur Ironworks, the demand which may spring up for indigenous dyes, and the prospects of tassar-silk in the European market—all these are causes too obscure and too complicated for it to be possible to anticipate their results and express them in a statistical form. It can only be said that these factors may have an important influence on the future of the railway, and that some of them stand a fair chance of coming into play on a large scale within the next ten years.

82. *The Midnapore route.*—In conclusion, I would add a few remarks upon the so-called Midnapore route, or, to speak more accurately, upon the proposal to substitute for the route from Chyebassa to Sitarampore, as laid down by last year's survey, a route from Chyebassa to Calcutta through or near the town of Midnapore. The engineering difficulties to be encountered on this route form, I understand, the subject of a special report by Mr. F. J. E. Spring, and need not be further referred to here. The competition of the canal on the sections from Midnapore to Calcutta has often been discussed before, and it has already been shewn that owing to the additional outlay involved in crossing a country intersected by huge tidal rivers, and liable to be flooded on a large scale, the carriage of a ton of wheat from the Central Provinces to Calcutta would be no cheaper by the Midnapore than by the so-called Burrakur route. One point, however,—and that perhaps the most important of all—has not yet been prominently brought to notice. Under ordinary conditions any railway may reckon upon carrying the trade of a strip of a country lying upon either side of the line. How broad the

strip may be depends upon circumstances, but it is always a strip. This may be called the normal relation of a railway to the country which it serves, and it is the relation, which obtains in the case of the Midnapore route. On the section from Chyebassa to Midnapore the traffic-yielding strip will necessarily be narrow, as it is hemmed in by the hills of the Orissa Tributary States on the one side and of the Chota Nagpore plateau on the other. The section from Midnapore to Calcutta would command a wide belt of traffic, but here the competition of cheap and easy communication by water has to be considered. On the other hand, the route from Chyebassa to Sitarampore not only has no water communication to fear, but owing to the peculiar conformation of the country both commands the traffic of its own strip and cuts off, so to speak, the traffic of an enormous tract of country to the west, which can only find an outlet by flowing towards the new line. It crosses, as it were, the mouth of an estuary of trade and intercepts its entire contents. This argument, the force of which will be evident from a glance at the annexed trade map, applies equally to the route through Midnapore itself and to the alternative scheme suggested by Mr. Wilson, Collector of Midnapore, for taking the line to Geukhali at the junction of the Hooghly and Rupnarain, and connecting it by a steam-ferry with the Diamond Harbour line. The latter route may be cheaper than the former, but it has special inconveniences of its own; and if it can be shewn that neither will command such a large body of traffic as the Sitarampore route both are equally condemned.

From Chamber to the Government of India.

Calcutta, 26th September 1883.

The Committee of the Chamber desire me to acknowledge your letter on the subject of the Nagpore Bengal Railway, No. 729 R. C., dated 17th ultimo, with enclosures, which reached them on the 22nd idem, but which they had previously read in the public prints.

The Committee learn with satisfaction that the question of railway communication between the Central Provinces and Bengal is engaging the earnest attention of the Government, and the information afforded has been perused with great interest, though it is not a full reply to the letters from the Chamber dated 29th November 1881 and 9th March 1882.

The Committee feel strongly that an independent line of railway is required, and nothing that has been put forward, either in your letter, or in the letter from the Government of Bengal to the Government of India, a copy of which you have handed to the Committee, satisfies the Chamber that the traffic of the Central Provinces can be satisfactorily worked over the East Indian Railway *vid* Sitarampore.

The Committee understand that the difficulties which the East Indian Railway has experienced for some years now, in

meeting the export trade, have not wholly arisen from inability to discharge at Howrah with sufficient rapidity. It is in the recollection of many, that a few years ago only grain was left rotting at stations on the East Indian line of railway through its inability to carry it; and yet notwithstanding such warning it has not been able to keep pace with its increase of traffic, and the dependence on it of the Oude and Rohilkund Railway to carry its traffic to Calcutta has, it is understood, resulted in large quantities of Oude and Rohilkund grain rotting at the stations in the present year, to the great loss of the native dealers, and the scandal of the Government connection.

After careful consideration, the Committee consider it very undesirable to allow the East Indian Railway the carriage into Howrah or Calcutta of the whole of the traffic west of the river Hooghly. Already the Chairman of the East Indian Railway Company at home has spoken as only one feeling that he represents a monopoly dare speak, and has shown that he is not prepared to facilitate trade at all in the manner necessary, and in the manner he would be forced to do if his Company had a healthy competitor to combat with.

It is, then, the Committee consider for the good of the country that there should be an independent line of railway connecting Calcutta with the Central Provinces, and they fear that any attempt to satisfactorily meet the traffic of these Provinces by a feeder line only to the East Indian Railway will prove a failure.

It is worthy of note, that in the letters both from the Government of Bengal and the Government of India, though so much is made of the extra cost of the direct line to the Central Provinces through the new construction required, nothing is allowed for the perpetual saving in time, wear and tear, haulage, &c., by adopting a route 71 miles shorter than the other; that although there is a large coal field at Hinger, the fact is not mentioned, but much made of the want of the cheap coal obtainable at Sitarampore for enhancing the expenses of working the line.

As to the proposed railway bridge over the river Hooghly at Hooghly, the site, the Committee consider, is most unsuited for the trade from the west to Calcutta, as has been pointed out to the Government of Bengal both by the Port Commissioners and by the Committee of this Chamber, and even if the bridge be eventually constructed there, another will, it is considered, be absolutely necessary nearer the city, over which the traffic of the Central Provinces line could pass. The traffic such a bridge would command, beyond that from the Central Provinces, would probably go far to meet the interest on capital.

In conclusion, the Committee would remark that they are not favourably impressed with the manner in which the direct route has been considered and handled. They would have liked to have seen the desirability of such a new independent line (its desirability they suppose is undisputed) admitted, and a desire shown to adopt it if sufficient evidence in its favour were forthcoming. Had this been

done and the reports of the officers given accordingly, they would probably have afforded all the testimony in its favour available; and the productiveness of the country between Calcutta and Midnapore would have been fully considered, the capabilities of the country beyond, as regards minerals as well as grain, would have been put prominently forward, the importance of a line—presenting in some portion of its length the most convenient point for connection with the Province of Orissa—would not have been lost sight of, and the facts that the storm that happened in 1874 did no very serious damage to the Midnapore canal, completed and opened in that year, and that the Damooda, Roopnarain, and Cossye rivers have been successfully controlled by the Irrigation Department for years, would not have been passed over without comment.

If Government, in ordering the survey of the route, had said it was in favour of it, if it saw figures to justify it in going on with it, the Committee feel that much more would have been reported in favour of the direct line; and if enough could not have been said to justify the Government in sanctioning it, the public would at any rate have been satisfied that, on a fair examination, the route was found incapable of giving a fair return on the capital required to open a line through it.

It is generally known, however, that Government favoured the other route, and the feeling is that the report submitted has been prepared more with the intention to support the Government view than to say all possible in favour of the direct line.

The Committee are decidedly of opinion that the Railway requirements of the country will never be properly met until Government returns to the old guarantee system, and it doubts the wisdom of the policy of allowing short paying lines to be constructed by private enterprise, while the longer, more important and less remunerative ones are left to the Government. It is obvious that the Government in the end is a loser by such a system, and that a moderate guarantee on the whole, letting the bad go with the good, will, in the end, be best for Government. By guarantee alone will lines be constructed with that speed which is necessary. The present slow progress is lamentable.

From Chamber to Government of India.

Calcutta, 8th December 1883.

I am directed by the Committee of the Chamber of Commerce to forward, for the information of the Government of India, the accompanying letter from Mr. F. Prestage, Agent for the Eastern Bengal Railway Company, bearing date the 1st October last, and commenting on the main points of Colonel W. S. Treyor's letter to the Chamber No. 729 R. C., dated 17th August last, on the subject of Railway communication between the Central Provinces and Bengal, and of the best route for the line to follow.

I am directed to state, in forwarding this enclosure, that the

views of the Committee of the Chamber upon the subject generally, are much in accord with those expressed by Mr. Prestage.

In conclusion, the Committee would impress upon Government the importance of giving further attention to the matter with the view of having the work quickly taken in hand if, as is expected, further examination shows its desirability.

To the Secretary of the Bengal Chamber of Commerce.

London, 1st October 1883.

My attention having been drawn to a letter from the Secretary to the Government of India, P. W. D. to the Chamber, dated Simla, 17th August last, and published in "The Pioneer," criticising the statements put forward in my note of the 9th of March last, forwarded with my letter to your address dated the 27th idem, again advocating the direct route *viâ* Midnapore, for the Central, Provinces Railway, as against the Loop Line *viâ* Seeterampore advocated by the E. I. R. Officials and the present Advisers of the Government of India, I beg to submit the following remarks in reply to the main points raised in Colonel Trevor's letter for the consideration of the Chamber.

2. In reply to paragraph 2, wherein Mr. Leonard and others are quoted as advocates of the Loop, I would beg to observe that I count Mr. Leonard amongst the many authorities I have consulted about this important matter since my arrival in this country, and that gentleman, with his experience of the manner in which all important loop lines in this country have ultimately been supplemented by the construction of chords (he quotes the case also of the E. I. R.), writes me "I also entirely take your view that it would be a serious blunder to throw the traffic of a great line over the "end of another great line; indeed, I am not sure that it would not "be a blunder even to the E I. R. to accept it."

3. I would also again beg to bring to prominent notice that, since Mr. Leonard and the other Officers mentioned recorded their opinions in 1868, the Irrigation Department of the Government of Bengal has completed the Midnapore Canal, by which the whole of the water-ways of the district alluded to have been thoroughly and successfully controlled; and responsible contractors have tendered for bridging the Damoodah, Roopnarian and Cossye at a total cost of Rs. 22,0[illegible],000.

4. I should also state that, owing to the manner in which efforts have been made to exaggerate the difficulties of dealing with the rivers alluded to, I, early last working season, again obtained, through the aid of the Officers of the Irrigation Department, detail sections of them (they were first obtained in 1877); and also to enable contractors to tender for the works, further detail surveys and sections have been made by an Engineer having special experience of such works as are required.

5. I understand that most of the past and present District Officers not only of the Burdwan District, but also of the Central Provinces, are now advocates of the direct line; and in judging of the opinions recorded in 1868, it should, I would beg to observe, be remembered that it was then, as it is now, thought by the E. I. R. Authorities that the line should be made as a feeble branch of, and feeder to, that railway; and I feel very confident that if the case is now put to the other Officers mentioned who are alive, as it has been to Mr. Leonard, with our latest experience of the working of the railways drawing traffic from the wheat producing areas in India, and if their attention is also drawn to the enormous advantages which the Mahanuddy Valley possesses for supplying almost unlimited quantities of that produce at less cost than any other known Province in the world, they will also now concur with Mr. Leonard.

6. There is also the fact that the E. I. R. was congested with the traffic that came upon the line last busy season, and to such an extent, that the consignors by the Oude and Rohilcund Railway have been urging for an independent outlet for that line to the sea face.

7. The block will be greater when the bridge over the Ganges at Benares is finished, and greater still when the Bengal N. W. Railway is completed, and the heavy traffic from that system also thrown on to the E. I. R.

8. In reply to the concluding part of paragraph 3, wherein Colonel Trevor states that the Government of India prefers the Northern route (the Loop) for famine purposes, I would beg to observe that famines are fortunately not constant in India, but the export of wheat from the Mahanuddy Valley would be; and judging from our experience of famines during the last quarter of a century, I am very confident that figures and results would shew that it would be far more advantageous for the Central Provinces Railway to bear the cost of carrying free over its system (and also over the E. I. R. if needs be) all food grains required for famine purposes, rather than burthen its heavy traffic with the serious additional constant cost of working round the Loop.

9. I have, unfortunately, not been favoured with copies of the documents alluded to in paragraph 5 of the letter under notice, but I do not see why the information obtained from a rapid reconnaisance of part of the route only should be set against the close investigation and consideration that so many others besides your Chamber and myself have given this important matter during the last fifteen years. And to begin with, I question the accuracy of the difference of the mileage between the Loop and the direct line now put forward. This has been given by some at 120 miles, and by the E. I. R., who are not likely to overstate it, at ninety miles, and now as the result of the reconnaisance at seventy-one miles. I still make the difference to be fully ninety miles, and the discrepancy may partly have arisen from our considering it so important to make the mileage as short as possible, and select the best crossings for the Damoodah, Roopnarain, and Cossye rivers,

that a line through the Midnapore District running some nine miles north of the station of Midnapore is advocated.

10. I note that the cost of the direct line, *exclusive* of the large bridges, is put down at Rs. 1,03,000 per mile, whilst the Loop through a more difficult country with very much more costly inland transport, and no water communication between Calcutta and the sites of the heavy bridge works is taken, *including* bridging, at Rs. 80,000 only. I am, however, for the reasons given in my note of March last setting forth the enormous gain from working the direct line, quite prepared to accept the figures now arrived at as the result of the late reconnaisance (as to the cost of construction only); although to the best of my judgment there is not, for the reasons already stated, cause to have faith in them.

11. In reply to the concluding part of paragraph 6, I have before stated that, by taking the line to the north of the station at Midnapore and above the tidal influence, the length of the line is shortened instead of lengthened; higher ground, better and well defined crossings of the rivers are also obtained.

12. In reply to paragraph 7. I admit that the results of working will only shew what the local and through traffic will be by the respective routes. I, however, do not concur in thinking that the unbeaten heavy tree jungles bordering much of the proposed route between Seeterampore and Dugni will produce more traffic than the fairly populous district of Midnapore, and what will become the highway for much of the heavy pilgrim traffic to Pooree, and also the general traffic for the greater part of Orissa, and the large areas south of the Province of Bengal.

13. As to the competition by the canal. When I last made the trip to and from Midnapore in March last, with special facilities, it took twenty-three hours each way to do it (about three miles per hour), and we had to change vessels five times, the whole journey being performed under the greatest discomfort. Such a mode of transit should not be considered sufficient, and can never compete with a railway.

14. A very short trip along the old Calcutta and Bombay road to the west of Midnapore, which is one of the few old roads in Bengal, will satisfy any one that there is now more local traffic on the road than could be secured for ages even by a railway from the jungles between Seeterampore and Chyebassee.

15. The recent difficulties in carrying the E. I. R. traffic during April and May in no way influenced my remarks made early in the previous March; but, now that a traffic of 5,000 tons a day has caused so much difficulty in working the whole of the line, mainly in consequence of the block at the Calcutta end, I maintain that when the bridge over the Ganges is completed at Benares, and the Bengal North Western Railway is at work, there will, under the most perfect arrangements, be more congestion than ever towards Calcutta, and it will be impossible to also work over the same rails the additional heavy traffic of the Central Provinces railway; and that, therefore, to form a reliable estimate of the comparative total cost of the two routes, the great cost of laying an extra

double line of rails between Calcutta and Seeterampore must be added, for the purposes of fair and useful comparison.

16. In forming an opinion of the carrying power of the E. I. R., it would appear that the professional Advisers of the Government of India have accepted the statements of the E. I. R. officials that their engines can haul 600 tons; but as a matter of fact, the published records of the Company shew from actual working, that the average dead weight of goods trains is 223 tons, and the freight carried only 172 tons (see published proceedings of the last meeting of the Shareholders); and I submit that in forming an opinion of the carrying power of a railway it is safer to be guided by actual results than to assume that the maximum duty will be constantly got out of every one and every thing.

17. Regarding the advantages of getting coal at Seeterampore, it has recently been brought to notice that the best of the Burrakur coal can be brought to the direct line by the original route for all coal to Calcutta, *viz.*, by the Damoodah, giving down stream water carriage of only 95 miles; and this no doubt would be the cheapest route for the Raneegunge coal for the length of the line for which it would be required.

18. It would also be the cheapest route for the best of the steam coal from the Raneegunge Coal field to Calcutta, and thus relieve the E. I. R. of much of the heavy coal traffic at the most crowded end of the line; an object, I still urge, very much to be desired.

19. I fully admit that if the E. I. R. and the Government Authorities are right in believing that the Calcutta end of that railway without quadrupling will be equal to carrying all the Central Provinces traffic, in addition to the other traffic that will more naturally come upon it, then the actual cost of construction of the railway works only of the loop will be the lesser; but it would appear from the letter now put forward, that the greater cost of providing twenty-five per cent. more rolling-stock required for the loop is still ignored; and sufficient weight is not, I again submit, given to the great and constant additional cost of constantly working it, and all the loads carried on the average 440 instead of 350 miles. The great cost of maintaining the additional rolling-stock is also still ignored.

20. In judging of the carrying power of the E. I. R., I find from information placed at my disposal by the Great Northern Railway Company that when the tonnage, near and through London, on that railway, began to reach 4,000 tons per day, the necessity for quadrupling that line was shewn. The E. I. R. has already reached over 5,000 tons per day, and will in time no doubt reach 8,000 tons, and surely the most sanguine officers of that Company, or of the Government, will not maintain that more than double the goods traffic can be worked over a double line of rails in India than in this country.

21. With regard to the cost of carrying, it appears to me unreasonable to in any way compare the cost of carrying by the proposed independent new main line with the present cost on the E. I. R. First, as substantial a railway could now be made and equipped by

the direct route as the E. I. R. for about half the capital outlay per mile. It could, at less cost, be provided with the heaviest steel rails, having sixteen times the life of the iron rails of the E. I. R., and be equipped with compound locomotives, shewing, with other improvements, a saving of some 40 per cent. in fuel, and with rolling stock of the most improved kind, shewing a saving of fully one-third in dead weight.

22. It may interest the Chamber to know that, during my voyage home, and stay in this country, I have had special opportunities of learning from past and present officials having experience of the Central Provinces, and from the Records of the India Office, the areas under cultivation with wheat in those Provinces or capable of producing that crop and the extent to which they can probably be easily increased; and from the information thus obtained, I learn that the Mahanuddy Valley is now capable of producing on an average 3,000 tons per day, and that it could be rendered easily capable of producing 13,000 tons, or more than double the quantity required in ten years to shew the results I have already put forward.

23. The advantages I have now had of obtaining more reliable information on this all-important point have gone a long way towards proving that the proposed main line west of Sumbalpore instead of being located so as to serve, most advantageously, only the small area on the north bank of the Mahanuddy, should follow closely the route of the old Calcutta and Bombay road, right through the centre of the Valley.

24. This involves crossing the Mahanuddy below Sumbalpoor; but all the piers of the bridge could be got in dry on the rock bed; and the cost, I am advised, would not be much greater than in dealing in detail with the numerous tributaries on the north bank of the river. The great gain would be that some 27,000 square miles of wheat cultivation would be more easily drawn from, instead of only 6,000 miles. The main through-line would also be rendered more direct. The question of the exact route at this end of the proposed line should thus also, I am of opinion, have more attention than it has received, and a decision should not be arrived at from the actual cost of construction per mile only in the first instance.

25. With regard to its being urged that because the site of the Railway Bridge over the Hooghly has unfortunately been fixed at Hooghly, the proposed new main line should make the necessary detour to be led over it, I cannot but hope that the opinion expressed by your President at your late meeting, and by the Joint Committee of the Chamber and the Port Trust Commissioners, strongly urging that, to meet the requirements of the Port, a Railway Bridge must be placed near Calcutta, will have the necessary influence on Government, and cause it yet to reconsider this important matter. If not, I understand Authorities in this country to be of opinion that another bridge must be built nearer Calcutta that will meet the requirements of the Port; and the Bridge at Culnah must also be erected to connect the E. I. R. with the E. B. R. and B. C. R. systems. Under any circumstances, the additional shipping accommodation recommended by the Committee on the west bank of the river

below Calcutta will give the necessary accommodation for the heavy exports from the direct line. It would even be better to run such traffic as may require it 23 miles up one side of the river and 23 miles down the other (particularly if no charge is to be made on one side as it has been represented will be the case), rather than give the whole of the traffic a needless detour of 90 miles.

26. I regret very much that the want of the information set forth in the documents alluded to in paragraph 5 of Colonel Trevor's letter prevents my rendering this reply as complete as I could desire; but I would beg to bring to the notice of the Chamber that further investigation and the especial inquiries I have had opportunities of making with Experts and Authorities in this country, more than ever satisfy me that the Chamber has followed the right course in advocating the construction of the direct line. I may add further, that, if the question of route is left for the consideration of Authorities in this country, with their greater experience in such matters, and more particularly in working, I have no doubt they will endorse Mr. Leonard's opinion as now recorded.

Yours faithfully,

F. PRESTAGE.

P. S.—Since the foregoing was sent to press, it has been brought to notice that during the late pressure on the E. I. R., that Company abruptly limited the receipt of goods from the Oude and Rohilcund Railway to some 800 tons per day, about one-fourth the quantity offering for despatch, thus further proving that the E. I. R. is already overpowered and seriously to the disadvantage of other important interests.

F. P.

SITE FOR THE E. I. RAILWAY BRIDGE.

CONCURRING in the views recorded by the Port Commissioners regarding the position chosen for the East Indian Railway bridge to cross the river at Hooghly, the Committee of the Chamber communicated to the Government of Bengal their opinion that the selected site was badly suited for the traffic, by that line, both with Calcutta and Eastern Bengal, and that a more convenient locality might have been found in the neighbourhood of Cossipore, which would have had the

additional advantage of securing the traffic of any new lines that may be constructed on the western side of the river and terminating in Calcutta. In an engineering point of view, the site at Hooghly may be considered preferable, but the trade conveniences of a bridge at Cossipore outweigh in the Committee's opinion the reasons for fixing the locality at Hooghly.

From Chamber to Government of Bengal.

Calcutta, September 5th, 1883.

The Commissioners appointed for the purpose of making improvements in the port of Calcutta have handed this Chamber a copy of a Resolution recorded by them in regard to the position chosen for a Railway Bridge across the river Hooghly, and of a letter with enclosure forwarded to your Government on the subject; and the Committee of this Chamber desire me to say that they concur in that Resolution and feel that a great mistake will be committed if the bridge be built at Hooghly as proposed by the East Indian Railway Company.

The Committee consider that the position chosen at Hooghly is badly suited for the trade by the East Indian line both with Calcutta and Eastern Bengal. It seems to have been fixed upon as a compromise between Cossipore and Kulnah, and is not convenient in any respect. When compared with a site in the neighbourhood of Cossipore it may have advantages from an engineering point of view, but the Committee submit that these should not be allowed to outweigh the convenience to trade which the

construction in the latter locality would afford, and they are of opinion that if the saving which will be effected by obviating the necessity of doubling the Eastern Bengal Railway line between Naihati and Sealdah and the increased use that will be made of the Bridge at Cossipore in conducting the trade of the Port on both banks of the river be taken into account, the Cossipore site will have more than convenience to recommend it. The advantages, too, of having a bridge so situated as to secure the traffic of any new railway lines constructed on the western side of the river and terminating in Calcutta are apparent. The Committee trust, then, that His Honor the Lieutenant-Governor will be pleased to take the views of the Port Commissioners and of the Committee of this Chamber into consideration, and endeavour to have the site of the railway bridge across the river Hooghly changed so as to convenience the trade of this port.

From Government of Bengal to Chamber,

Dated Darjeeling, 18th September 1883.

I am directed to acknowledge the receipt of your letter, dated the 5th instant, in which it is stated that the Committee of the Bengal Chamber of Commerce concur in the Resolution recorded by the Port Commissioners in favor of changing the site of the proposed railway bridge across the river Hooghly from Hooghly to Cossipore. The Lieutenant-Governor desires me, in reply, to say that the suggestion will be taken into consideration when the report of the Committee now sitting to consider the best means of increasing the accommodation in the Port of Calcutta is received.

THE PUTTIALA STATE RAILWAY.

THE proposed employment of the agency of the Scinde, Punjab and Delhi Railway Company for the construction of the Puttiala State Railway having been brought to the notice of the Chamber as a direct discouragement of work by contractors in the open market, and consequent departure from the principles which had been enunciated by Government regarding the promotion and protection of private enterprise, the Committee addressed the Government of India on the subject.

They were informed, in reply, that as the Puttiala Durbar proposed to utilise a portion of its surplus revenue in the construction of a line to be connected with, and worked by, the Scinde, Punjab and Delhi Railway as a branch of its main line, it was in the interests of the Puttiala Durbar that the latter Company should construct it, as they were in a position to do so at a less cost than by private contractors.

From Chamber to the Government of India.

Calcutta, 26th June 1883.

The Committee of the Chamber of Commerce desire me to submit for your consideration the following remarks relative to the construction of the Puttiala Railway.

It has been stated, in the *Indian Daily News* and other Indian newspapers, that the Government of the Punjab has used its influence with the feudatory State of Puttiala to prevent it from inviting offers in the open market for the construction of its railway, and has induced the guaranteed Scind, Punjab and Delhi Railway Company to undertake the contract for the line about to be commenced.

The Government of the Punjab may have had good reason for not permitting tenders to be invited, though the reason does not suggest itself to the Committee of this Chamber, who regret that any opportunity of encouraging private contractors in this country, where they are so much wanted, should be neglected.

The Committee recognise the importance of opening up this vast country with railways, and that without Government aid the process must be deplorably slow—far too slow for the increasing requirements of the empire; but while they strongly advocate Government aid in the development of railways where that aid is indispensable, they are far from advocating that Government should undertake work which can be as economically executed by private enterprise; and the Committee would deprecate any departure from the principles which the Government of India has been recently enunciating.

From Government of India to Chamber.

No. 701 *R. C.—Simla, 8th August* 1883.

I am directed to acknowledge the receipt of your letter of the 26th June 1883, to the address of the Department of Finance and Commerce, regarding the employment

of the Agency of the Scinde, Punjab and Delhi Railway Company for the construction of the Puttiala State Railway.

In reply, I am to state that it is proposed by the Puttiala Durbar to utilize a portion of its surplus revenues in the construction of a broad gauge railway from the Rajpura Station of the Scinde, Punjab and Delhi Railway to Puttiala, and that as the railway will, when completed, be worked by the Scinde, Punjab and Delhi Railway Company, as a branch of its main line, it is in the interests of the Puttiala Durbar that that Company should construct it, as recent experience in the Punjab indicates that the Company are in a position to do so at a less cost than a private contractor.

JAIL MANUFACTURES.

UPWARDS of 3 years ago the Committee of the Chamber expressed to the Government of Bengal their apprehension that the increased introduction of machinery into jails would result in further hurtful interference with private manufacturing industries. A Resolution by the Government of India, dated the 22nd of September 1882, dealt with this subject; the mischievous tendency of such competition with private concerns was strongly deprecated, and the Government not only determined against the increase of steam machinery in jails, but also against allowing that already in existence to continue to work on jail account. The Resolution

was accepted with much satisfaction by the Chamber; but notwithstanding the policy so forcibly and wisely put forward by the Governor-General in Council the Secretary of State has opposed it, and the Committee cannot but regard with extreme disappointment the reversal of orders which were issued in the true interests of the country.

From Chamber to the Government of India.

Calcutta, 26th June 1883.

The attention of the Chamber of Commerce has been drawn to articles in the *Pioneer*, and other Indian newspapers to the effect that the Secretary of State is opposed to the policy of the Government of India respecting Jail manufactures as set forth in its Resolution dated 22nd September 1882.

In their letter to the Government of Bengal, dated 2nd August 1880, the Committee of the Chamber of Commerce expressed their apprehension that the increased introduction of machinery into Jails would result in further hurtful interference with private industry, and they were glad that the Government of India so fully recognised this, that in its Resolution it not only determined against the increase of steam machinery in Jails but against allowing that already in existence to continue to work in competition with private concerns.

The Chamber of Commerce accepted the Resolution of the Government of India with satisfaction, as an earnest of its desire to encourage private enterprise in the country

that the manufacturing industries which are of such incalculable benefit to the native population might be largely developed. Twelve months have not elapsed since this prudent Resolution was published, and yet the confidence it has inspired has been such that already large works are in progress which, when completed, will afford remunerative employment to many natives and materially extend the manufacturing power of the country.

The public will now be greatly disappointed if the former policy be reverted to, and the Jails maintained as factories in which the local Governments, with machinery and the assistance of unpaid convicts, compete with private capital and the labour of the law-observing population of the country.

The Government Resolution has so exhaustively dealt with the mischievous tendency of such Jail competition that it is unnecessary for the Chamber to put forward further arguments, but special attention might profitably be directed to the cost of buildings in connection with Jails. The cost has much increased on account of it being considered necessary to adapt the buildings to receive machinery, and then the high cost of the buildings is advanced as a reason why they should be filled with machinery in order that the Government may get an adequate return for the expenditure. The Committee consider that increased outlay on buildings should be confined to what is necessary for increased accommodation required and for improvement in a sanitary sense ; and the careful scrutiny of plans of buildings before being sanctioned would prevent outlay being incurred so burdensome on the Government as to necessitate its seeking relief by competing with private manufacturers.

The Committee share the views of Government regarding the employment of extra-mural labor upon large public works, such as docks, canals, &c., works of public utility upon which, in other countries, prison labor has been long employed with great advantage. Some of the great harbour works in England and France point significantly the direction in which India might profitably follow European countries in employing her convicts.

The Government of India and the local Government have but recently brought to the Chamber's notice works in contemplation for the development of the resources of this country, and such works would afford suitable employment for prisoners, for years to come. It is worthy of note that the Government of Bombay Resolution on the Report by the Inspector General of prisons on the Jails in that Presidency states that increased employment of extra-mural gangs has been a very decided success.

The Committee hope, then, that a proper representation to the Secretary of State will satisfy him that the principles laid down in the Resolution of September last are such as can be wisely and profitably followed in this country.

BILL TO AMEND THE LAW RELATING TO STEAMSHIPS.

THE Bills to amend the law relating to Steamships and to Inland Steam vessels which form the subjects of the two following paragraphs of this Report, were passed in the Legislative Council of the Governor-General and have received His Excellency's assent.

The Statements of Objects and Reasons explain the necessity for altering the law in regard to these matters, and the replies of the Chamber, whose opinions were invited on each of the proposed measures, will inform members of the views put forward by the Committee relative to the provisions of both Bills.

From the Government of Bengal to Chamber.

No. 38 *T—G. the* 10*th April* 1883.

In forwarding the enclosed copy of the Bill (with the Statement of Objects and Reasons) to amend the law relating to the survey and the examination and grant of certificates to engineers of steamships, I am directed to request that the Chamber will be good enough to favour the Lieutenant-Governor, not later than the 15th of May next, with an expression of their opinion on the provisions of the Bill.

STATEMENT OF OBJECTS AND REASONS.

A CASE having occurred in Bombay which showed that the Bombay law relating to the survey of steamships was not in harmony with the English law on the subject, it was thought desirable to amend the Bombay law. When, however, the question of legislation came to be considered, it appeared that there were no less than seven local Acts relating to steamships. Bombay, Bengal and Burma each had its special law regulating the survey of these ships, while there was no law on the subject in the

Presidency of Madras. The multiplicity of laws relating to the survey of steamships, it was thought, could not but be inconvenient to shipowners whose ships traded between different Provinces. For instance, Act XVI of 1871, which is in force in Burma, requires every steam-vessel plying on any of the rivers or waters of British Burma, except steam-vessels plying between a port in British Burma and a port not in British India, to be surveyed twice a year. In the same way, the Bombay Act II of 1864, as amended by Bombay Act IV of 1873, requires every British steam-vessel, not holding a Board of Trade, British Indian or Colonial, certificate, carrying passengers between any port of the Presidency of Bombay and any other port, to be surveyed twice a year, and the Bengal Act V of 1862, as amended by Act I of 1868, also requires the survey twice in every year of all steam-vessels plying on any of the rivers or waters within the Province of Bengal, except steam-vessels which may ply between some port within that Province and some port not in British India. Under these laws, a steam-vessel which was surveyed in Bombay might, apparently, be required to undergo a fresh survey on arrival in Calcutta, and another survey on arrival at a port in Burma. As legislation is necessary, it is, therefore, clearly expedient to have one uniform law relating to the survey of steam-vessels applicable to the whole of British India.

2. Besides providing for the survey of steam-vessels, the local Acts provide also for the examination of, and the grant of certificates to, engineers, and for holding investigations into explosions occurring on board steam-vessels. In these matters uniformity in the law is desirable.

3. After consulting the Local Governments concerned, the Government of India has decided to legislate so as to provide one law relating to the survey of sea-going steamships, the examination and grant of certificates to engineers of those ships, and the investigation into explosions occurring thereon. The present Bill has accordingly been prepared. It was, however, found at the same time necessary to legislate in like manner for steam-vessels plying on rivers and inland waters, inasmuch as the provisions of the local Acts related, to a certain extent, to those vessels as well as to sea-going vessels. With this view, a separate Bill—the Inland Steam-vessels Bill—has been prepared so as to keep the law relating to merchant shipping—a law liable to be effected by legislation in England—entirely separate from the law regulating inland steam-vessels, which is a matter solely within the scope of Indian legislation.

4. The present Bill is divided into three chapters. The first chapter is purely formal. The second deals with the subject of the survey of steamships. It provides that a steamship shall not carry more than twelve passengers between places in British India, and that a British steamship shall not carry more than twelve passengers to or from any place in British India from or to any foreign port, unless she is furnished with a certificate of survey. It exempts steamships furnished with Board of Trade certificates or Colonial certificates, provides for the appointment of surveyors and ports of survey, prescribes the powers of surveyors, and the conditions on which they are to grant certificates. It provides for the fees which are to be paid for certificates and the term for which they

are to last, and it confers on the Local Government the power, under certain circumstances, of cancelling or suspending a certificate. It further enables the Local Government to make rules to regulate the time, place and manner in which surveys shall be made, and to assign and regulate the duties of each of the surveyors making it. To meet local requirements, a section (22) is also added, enabling the Local Government to exempt any specified class of steamships from all or any of the provisions of the chapter.

5. The principal changes introduced in the law by the provisions contained in the second chapter are as follows :—

Section 3 follows the English law (39 & 40 Vic., cap. 80, section 16), and only requires a survey in the case of steamships carrying more than twelve passengers.

The law as at present in force in Bengal and Burma is thus amended in an important point, and cargo steamers are exempted from survey.

Another change in the law is made by section 15 of the Bill, which provides that a certificate of survey shall not remain in force for more than twelve months. At present, the law requires a survey twice a year, but it is thought that the power which the Local Government has under section 16 of the Bill of cancelling or suspending a certificate renders a survey every six months unnecessary.

Section 20 of the Bill enacts the provisions (regarding the grant of certificates of survey to foreign ships) of section 19, 39 & 40 Vic., cap. 80. It is considered that these provisions will be of use in India in the case of foreign

ships which have been officially surveyed at a foreign port.

6. The third chapter of the Bill deals with the examination of, and grant of certificates to, engineers. It also contains a provision as to inquiries into cases of explosion, and miscellaneous sections regulating the jurisdiction and place of trial in cases of offences under the Act, and applies to steamships going to sea from a place in the Bombay Presidency the provisions as to boats for sea-going ships of the Imperial Merchant Shipping Act, 1854.

7. Following the Imperial Merchant Shipping Act Amendment Act, 1862, the chapter provides that there are to be two grades of engineers—first-class engineers and second-class engineers. The Local Government is empowered to appoint examiners, and to make rules as to the conduct of the examinations, the qualifications to be required from the applicants, and the fees to be paid by them. Certificates will be granted to those who, by the result of the examination, show themselves to be possessed of the necessary qualifications.

8. This chapter also provides (section 26) for the grant of certificates of service as engineers. A first-class certificate may be granted to a person who has served, before the passing of the Act, for a period of not less than one year as first engineer in any foreign-going steamship carrying engines of one hundred nominal horse-power or upwards, or who has attained, or shall attain, the rank of engineer in Her Majesty's service.

A second-class certificate may be granted to a person who has, before the passing of the Act, served as second

engineer in such a steamship, or as sole engineer in a smaller one, or who obtains the rank of first-class assistant engineer in Her Majesty's service. It is doubtful whether it is necessary or expedient to provide for the grant of certificates of service. The attention of the Local Governments concerned will be drawn to the point.

9. It is further provided (section 29), that foreign-going steamships shall not proceed to sea without engineers possessing certain specified certificates. Similar provisions are made for home-trade steamships, the steamships which are inland steam-vessels within the meaning of the Inland Steam-vessels Act being excepted.

10. The provisions of section 31, as to investigations into explosions, require no comment; and the last four sections of the Bill merely re-enact the existing law as to jurisdiction, the place of trial, the recovery of fees and fines, and the application to steamships leaving a port in the Bombay Presidency of certain provisions of the Imperial Merchant Shipping Act, 1854, concerning boats for sea-going ships.

C. P. ILBERT.

The 5th March 1883.

From Chamber to Government of Bengal.

Calcutta, 30th May 1883.

I have the honor to acknowledge receipt of your No. 38-T.-G. of the 10th April, and, in reply, am instructed by the Committee of the Chamber of Commerce to offer the following remarks upon the Indian Steamships Bill of 1883.

Chap. II. 3.—The effect of this section appears to be to allow a foreign owned vessel to carry passengers to Mauritius and Natal without any certificate. If this be so, there seems need for an alteration of the section to prevent a passenger trade to those places being carried on in foreign bottoms which may or may not be suitable for passengers.

It would also appear necessary to so define "British Steamships" as to cover craft owned by Natives of India.

Section 4.—It would be satisfactory if it were more clearly stated that these Board of Trade or Colonial certificates shall carry a vessel to any port within the jurisdiction of the Governments of India and Ceylon during the *entire currency* of such certificates.

Section 5.—In the same way it should be clearly stated that under a certificate expiring after a vessel had left a survey port, and before she reached another, she should be entitled to all the advantages the certificate if still in force would have secured to her. As worded at present the section merely absolves her from penalty, and it might be read by officials at intermediate ports to allow a vessel merely to continue her voyage with whatever passengers were already on board, but not to continue her trade.

Section 11.—After the experience gained of the power of work of an official such as Mr. Bushby, the provision for two surveyors would appear a needless expense to vessels trading under this Act. Double fees would be an unnecessary tax.

Section 14—read with section 7, involves the impossibility of the certificate of survey being in two places at

once. This document should be issued in duplicate if the suggested procedure be considered desirable.

Section 21.—To insure the uniformity of practice stated to be the aim of this Bill, these rules should be made by the Government of India, or, at any rate, be revised by that Government before publication.

Section 26, *para a.*—This would appear to be a misprint. There can be no first engineer of a year's service without a certificate. Before the passing of the Act of 1868, from which this section is copied, uncertificated chief engineers were allowed to go in charge of such engines, but since the passing of that Act all vessels have been compelled to carry certificated chief engineers.

A chapter repealing existing Acts or amending them appears to have been omitted from this Bill. It, therefore, follows that if this Bill becomes law in its present form, a passenger vessel would become liable to three surveys annually,—one (yearly survey) under this Bill, and two (half-yearly) under Act VIII. of 1876—and these in addition to the frequent examinations (at every port at which passengers are embarked,) per certificate B. under section 11 of Act VIII. of 1876.

When revising Act VIII. of 1876, advantage should be taken to modify the procedure under which certificate A. is granted. Section 10 of that Act provides for the issue of a certificate half-yearly of seaworthiness, of proper equipment, *and of the number of passengers* a given vessel is capable of carrying. Now the number of passengers once ascertained, no remeasurement is necessary during the life of the vessel, unless an alteration of the law varies

the space allotted to each passenger, or unless any alteration be made to the vessel herself. As the law now stands this number is subject to revision each six months, and a case has been cited to the Committee in which the number allowed was changed three times in eighteen months.

The wording of section 19 of Act VIII. should also be amended. At present the section runs, "and shall contain on the upper deck at least," &c.

As vessels are now built there frequently are more than one upper deck, for instance, a poop deck and a saloon deck; but surveyors have held that this section precludes the measurement of more than one upper deck. A reference has already been made to the Government of India regarding poop decks which are specially ruled to be measurable, but saloon decks are still excluded from the space available for passengers, notwithstanding the fact that they are by far the coolest and safest places for passengers in the ship. These saloon decks must not be mistaken for the bridge decks set apart specially for the navigation of the vessel.

The question as to these decks being measured has only recently been raised, and as a consequence the number of passengers which a vessel can now carry is far less than were allotted to her even a few months ago. It would appear that very large numbers of deck passengers have been moved from port to port in the Bay of Bengal in safety and comfort, and at rates of passage money which will be impossible if the number allowed to a vessel be so seriously curtailed. The tendency of raising the

rate of passage money would be to force back these deck passengers into the old wretched native craft in which they used to toss about, exposed to all weathers, until frequently they went to the bottom, or at other times returned, baffled, robbed, starved and more than half-dead to the coast whence they had set out.

When deciding what spaces are to be measured for passengers in steam vessels, a too close adherence to Board of Trade rules should be carefully avoided, the circumstances of the trade legislated for being entirely different; so much so, that the coveted warm corner near the boilers during an Atlantic voyage in winter would be the very last place in the ship to which an Indian passenger in a voyage from Madras to Calcutta in the month of May would go for comfort.

BILL TO AMEND THE LAW RELATING TO INLAND STEAM VESSELS.

From the Government of Bengal to Chamber.

No. 30 *T—G. the* 10*th April* 1883.

In forwarding the enclosed copy of the Bill (with Statement of Objects and Reasons) to amend the law relating to the survey, and the examination and grant of certificates to engineers of inland steam-vessels, and to provide for certain other matters relating to those vessels, I am directed to request that the Chamber will be good enough to favour the Lieutenant-Governor, not later than the 15th May next, with an expression of their opinion on the Bill.

STATEMENTS OF OBJECTS AND REASONS.

It has been found expedient to legislate in order to bring the law regarding the survey of sea-going steam-vessels into conformity with the law of England, and to have one law on that subject applicable to the whole of British India. The present law regulating the survey of these vessels is contained in various local Acts, which also contain provisions relating to inland steam-vessels; and it was thought that it would be better to repeal the whole of these Acts and separately enact the parts relating to sea-going and inland steam-vessels than to repeal only so much as was necessary and leave the Acts in a mutilated and probably obscure form. Moreover, it was thought desirable that there should be one law regarding inland steamers relating to the whole of India. The present law is insufficient. Madras is unprovided for, and there is no law to govern steamers plying in the province of Assam. The present Bill has accordingly been prepared. It is drawn so that it may be brought into force along with the Indian Steamships Bill, and it repeals the seven local Acts, relating to steamships, which are now in force.

2. The Bill is divided into eight chapters. It deals with the survey of inland steam-vessels, the examination and grant of certificates to masters and engineers of those vessels, the investigation into casualties occurring to them, the suspension and cancellation of masters' and engineers' certificates, and the protection of the vessels from fire, and also prescribes the penalties for offences against the provisions of the Act, the jurisdiction of Magistrates and the place of trial.

3. In its main provisions the Bill follows the existing law so far as it goes. The points in which the law is changed and which require notice are as follows:—The term for which the certificate of survey is to last is, by section 12 of the Bill, extended to one year, instead of six months as at present, but section 13 enables the Local Government, under certain circumstances, to cancel or suspend a certificate of survey. The power conferred by section 17 of the Bill of making rules to regulate a survey is somewhat larger than that given by the present law. The duties of each of the two surveyors are different, and the Bill therefore enables the Local Government to assign and regulate the duties of each. To meet local requirements, power is given in section 18 of the Bill to Local Governments to exempt any specified class of inland steam-vessels from all or any of the provisions relating to survey. In section 22 the Bill provides for the grant, without examination, of a certificate as engineer to a person who possesses a certificate granted under the Imperial Merchant Shipping Act, or a certificate which is by the Merchant Shipping (Colonial) Act, 1869, equivalent thereto. It further provides in section 23 for the grant of certificates of service to engineers who have served for a certain time in certain steamships, or who have obtained the rank of first-class assistant engineer in the service of Her Majesty. The provisions of Chapters IV and V of the Bill, regarding investigations into casualties and the cancelling and suspending of the certificates of masters and engineers, are taken, with slight modifications, from the Merchant Shipping Act, 1883, which was recently passed.

4. The whole of Chapter VI is new. At present

there is no way of securing that due precautions are taken against fire and against the carriage of dangerous goods on passenger steamers. Chapter VI follows to a certain extent the provisions of the Indian Railway Act, 1879. It confers on the Governor-General in Council power to declare what shall be deemed to be, for the purposes of the Act, dangerous goods, and prohibits persons from taking those goods on board except under certain conditions. Following section 23 of the Imperial Merchant Shipping Act, 1873, it empowers (section 46) the master or owner of a vessel to throw overboard dangerous goods which have been brought on board without notice or without being marked as required by the Act. It also (section 47) enables the Local Government to make rules for the protection of inland steam-vessels from danger by explosion or fire.

5. In Chapter VII a section (56) has been inserted providing a penalty for misconduct on the part of persons employed on board inland steam-vessels. This section is taken from the Indian Merchant Shipping Act, 1859, section 79, the penalty being modified so as to permit of an offence being punished by fine only.

6. Lastly, with regard to the rules which may be made under the Act, the Bill, section 62, secures that they shall be duly published for general information and criticism before they are sanctioned by the Governor-General in Council.

7. A statement is annexed showing how the provisions of the Acts which are repealed by the Bill are dealt with in this Bill and the Indian Steamships Bill.

C. P. ILBERT.

The 5th March 1883.

From Chamber to the Government of Bengal.

Calcutta, 30th May 1883.

I have the honor to acknowledge the receipt of your No. 30 T-G, (Marine) dated the 10th April. In reply, I am directed by the Committee of the Chamber of Commerce to offer the following remarks upon the Bill for the Survey of Inland steamers to which it gives cover.

It appears to the Committee that the Bill has been drafted upon insufficient information of the circumstances and needs of the trade, and that in order to meet the requirements of the case it should be re-drawn upon entirely different lines. In making this remark, however, the Committee would guard themselves as regards inland rivers other than those of which they have experience. Conditions under which inland steamers ply in different parts of India are so different, that it would appear difficult to draw a Bill for universal application. The need for uniformity in the several Presidencies which is so essential in the law relating to ocean-going steamers does not apply to vessels navigating inland waters, for from their very construction inland steamers plying on one side of India rarely find themselves on the other side, and in the rare cases where such transfer has been made it has been in view of a permanent change in their employment. This remark applies equally to the masters and engineers of these vessels; as a rule, these men form ties in or are natives of the country in which their work lies, and they are not as in the cases with masters and engineers of ocean-going steamers in Bengal to-day and in Bombay a fortnight hence. Taking these remarks, then, for what they are worth for Bengal, the Committee would

uggest, if it has not already been done, that special inquiry be made into the circumstances of the trade in the inland waters of Bombay and Burmah, and that separate chapters be added, if need be, to meet the requirements of those Provinces.

The Bill proposed in para 4 of section 4, of Chapter 1, defines an inland steam vessel as one which ordinarily plies on inland waters, and makes all these vessels subject to one set of rules, whereas the fact is, that five distinct classes of vessels have to be legislated for.

1. The large powerful steamer capable of taking, with its attendant flats, large numbers of passengers and cargo upon voyages of many days' duration. These vessels are almost constantly in fresh water; they occasionally pass into brackish water in the creeks. Under existing circumstances these vessels carry thoroughly competent masters and fully qualified engineers.

2. Smaller vessels, not over 120 tons net register or 80 horse-power, nominal, and principally working as feeders to these—No. 1—main line steamers, and rarely, or very rarely, visiting Calcutta. These steamers are employed in fresh water only, and consequently any hull deterioration is very slow. Under existing conditions vessels up to about this tonnage and horse-power may be managed by serangs and certificated engine-drivers.

3. Ferryboats plying in the Hooghly, commanded and officered in most cases by native men of the same standing as those in class 2. These vessels, by running frequently in brackish water, would probably require more frequent

hull examination in dock than would be necessary in the case of Nos. 1 and 2.

4. Steam tugs:—partly fresh water, and partly sea-going vessels, officered by pilots and requiring first-class engineers.

5. Steam launches, small cargo boats, tugs and coal barges plying for hire.

As regards the *first class* named, the Committee's view is that the provisions in the draft bill as regards an annual survey of boilers and machinery, and the necessity for certificated masters and engineers, should obtain; but as regards hull examination, that docking for the purpose of such examination should not be required, except under exceptional circumstances, oftener than once in, say, four years.

As regards the *second class* named, or, say, for all inland vessels not over 120 tons net register or 80 horse-power, nominal, the provision anent the annual survey of boilers and machinery should obtain; but that docking for the purpose of hull examination should not, except under exceptional circumstances, be required oftener than once in four years. And then as regards masters and engineers that it should be sufficient that the men in charge should be serangs and engine-drivers.

As regards the *third class*, that the provision should be as for the second class, but as regards the third class the Committee would expect that the surveyor, considering the greater contact with salt water a sufficiently exceptional circumstance, would probably order more frequent docking than once in four years for hull examination.

As regards the *fourth class*, that the provision anent annual survey of boilers and machinery and hull should obtain, including docking for hull examination : also that the rule as regards certificated engineers should obtain, but that it should be lawful for pilots of the river Hooghly to act as masters of tugs plying in the Hooghly.

As regards the *fifth class*, that for public safety the rule as regards annual survey of boilers and machinery should obtain ; but that the necessity for docking for hull examination should not lie on owners, and, of course, that the boats may be managed by serangs and engine-drivers.

The Committee observe that the draft bill provides for the appointment of two surveyors ; this they consider unnecessary : a man of the experience of Mr. Bushby, the present Surveyor in Calcutta, is amply qualified to do all that is necessary in the survey of both hull and machinery.

In the days of wooden ships, and when engines were of comparatively recent construction, shipwrights were needed to properly survey the hull of a vessel, and such men were probably entirely ignorant of engines. This involved a second surveyor. Now that steamers are all iron, a properly qualified engineer-surveyor is about the most capable man to examine the hull ; the state and quality of the iron-plating, the strength of material, and quality and condition of the rivets are matters which form a principal part of his technical knowledge, and this being so the employment of a shipwright-surveyor is a needless expense.

Then again, and particularly, in the interests of vessels described under class 2 and employed away from Calcutta,

it would be necessary that surveyors should be appointed at out-posts, as it could not be expected that owners would bring vessels to Calcutta for survey. As regards this Presidency, surveyors might be appointed at Dhubri and Goalundo, and perhaps at Dibrooghur in Assam. The engineering talent available at these points should be equal to all that is required in surveys of machinery and boilers and afloat surveys of ships' hulls.

Referring to the question of the different grades of men who, it is suggested, should be held sufficient for the management of inland vessels of particular sizes, the Committee think that the examining Board should, for the examination of masters for up-country steamers, consist largely of men who had served successfully as masters of inland vessels. The knowledge required for this service is a special knowledge, involving very little actual seamanship beyond the rules of the road, and so on, and to make masters pass an examination in seamanship would appear entirely unnecessary. They approve, however, of a suggestion made to them, that no man be appointed master of any inland steamer of a larger tonnage than 120 tons net register who had not previously served as an officer on board of inland steamers for a period of at least two years. In the same way the master of tug or steamer going to places below Diamond Harbour should be qualified as under existing rules.

A Board of Examiners does already exist for the passing of engine-drivers considered capable of working boats up to about 120 tons net register or 80 horse-power, nominal; and the Committee would suggest that a similar Board should be called into existence for the examination

and passing of serangs to be held qualified as masters of vessels of similar tonnage. It would also appear desirable to allow small vessels to ply in charge of one certificated officer only, provided he holds certificates of competency both as master and engineer.

Section 22 of this Bill appears to require that certificated engineers under the Imperial Merchant Shipping or other Acts must take out a special certificate under this Bill before being eligible to serve as an engineer on an inland vessel. To this the Committee would beg most respectfully to demur; a certificate of competency as engineer from any properly constituted Board of Engineers should be ample to entitle its holder to serve on inland vessels, and the demand of a fee for this special certificate required by this Bill would appear to the Committee to be a needless fine upon such men.

The Committee would also demur, as they have already done upon more than one occasion, to the definition that the term "owner" includes an agent. They take exception also to the power granted to a magistrate under section 57 to distrain on a vessel for recovery of a fine imposed on a master. Not only might the efficiency of a vessel be seriously impaired by such distraint, but the punishment might fall upon an innocent owner, while the guilty master would escape.

THE NATIVE PASSENGER SHIPS ACT.

THE Committee having been requested by the Government to express their opinion on the

Bill to amend this Act which had been prepared under the circumstances mentioned in the Statement of Objects and Reasons for the better regulation of the pilgrim traffic between Arabia and British India, they replied that they did not see any objection to the provisions of the proposed measure.

From Government of Bengal to Chamber.

No. 1384. *Calcutta the 29th June* 1883.

In forwarding the enclosed copy of the Bill (with Statement of Objects and Reasons) to amend the Native Passenger Ships Act, 1876, I am directed to request that the Chamber will be good enough to favor the Lieutenant-Governor, not later than the 15th July next, with an expression of its opinion on the provisions of the Bill.

STATEMENT OF OBJECTS AND REASONS.

THE object of this Bill is to amend the Native Passenger Ships Act, VIII of 1876, with a view to provide for the better regulation of the pilgrim traffic between British India and Arabia. This traffic has formed the subject of correspondence between the Secretary of State, the Government of India, and the various local Maritime Governments in India. A careful consideration has brought the Government to the conclusion, that the importance of the pilgrim traffic makes its detailed regulation imperative, and that, to secure uniformity of procedure, and thereby avoid the friction which must inevitably follow divergence between rules separately framed by different States, it is desirable

that, in all the more important points, a common understanding should be come to among the Governments who are chiefly interested in the proper management of that traffic. The establishment of a practical concidence between the general provisions of the local Turkish regulations and those of the law of India—the country which at present furnishes the largest number of pilgrims to the Hedjaz—can only be effected by diplomatic correspondence between the British and Turkish Governments. But since experience has shown that the provisions of the Indian law as it at present stands are insufficient to meet the peculiar exigencies of this traffic, and that in some respects they require revision, it seems desirable, before attempting to bring about an assimilation of the British and Turkish laws, to make such amendments of our own law as are necessary to put it in a satisfactory state.

2. The Indian law on this subject is contained partly in the provisions of the Native Passenger Ships Act, 1876, and partly in those of the rules framed under that Act. With a view to the amendment of the latter, the Government of India has already submitted to the Secretary of State a copy of a draft set of rules, which have been framed on the model of those regulating the transport of emigrants from India to the English and French colonies, and which it proposes to issue under the Native Passenger Ships Act, 1876, as rules regulating the conveyance of Native passengers between the ports of India and of the Hedjaz. With a view to the amendment of the former, the present Bill has been prepared.

3. Section 2 adds to section 11 of the Native Passenger Ships Act, 1876, a provision requiring the certificate

given under that section to contain in the case of a ship sailing to the Red Sea a declaration that she is propelled principally by steam, and when the ship carries more than 100 Native passengers a declaration that she has on board a licensed medical officer. The effect of this will be that such ships will not be able to obtain a port-clearance (*see* section 9) unless they comply with these requirements.

4. Section 3 amends section 26 of the Act, by requiring the bond given under that section to be conditioned for the observance of the provisions of the Act, and of such rules with regard to Native passenger ships sailing to the Red Sea as the Governor-General in Council may make under section 46 of the Act. The object of this amendment is to enable the Government of India to enforce the observance of its rules beyond the limits of its jurisdiction.

5. The substitution (by section 4 of the Bill) of 60 for 30 as the number of passengers which must be on board a ship in order that section 27 of the Act may apply, follows as a necessary consequence of the provision that all ships are to be propelled by steam (*see* section 2 of the Act.)

6. Section 5 empowers the authorities at Aden to refuse a bill of health to a ship if the requirements of the rules are not complied with.

7. The sections (28A, 28B, 28C) which section 6 adds to the Act require every ship sailing to or from the Red Sea and carrying more than 100 Native passengers to have a licensed medical officer, and every Native passenger ship sailing to or from the Red Sea to be propelled principally by steam, and empower the Governor-General in Council to issue a notification directing that no passen-

ger of such description as may be specified in the notification shall be received on board any such ship until he has obtained a certificate from a prescribed medical officer certifying that he is not suffering from any infectious or contagious disease, and is in a fit state of health to proceed to the port to which he intends to proceed.

With regard to section 28A, the Government has no doubt that the presence of a medical officer on board will serve to diminish many of the hardships from which pilgrims now suffer, especially if he is by rule made responsible for seeing that the sanitary and dietary arrangements on board are properly managed, and if he is liable to be disqualified for any breach of duty on his own part. It may not always be possible to secure Muhammadan medical men for this service, but endeavours will be made to supply officers of that persuasion in preference to others. Section 28B speaks for itself. Section 28C may have to be enforced, at the instance of the European powers, as a precaution against the possible introduction of epidemic disease by Indian pilgrims into Arabia.

8. Section 7 imposes penalties for breaches of the requirements of the Bill.

9. Lastly, by section 8, certain words are added to section 46 of the Act to enable the Governor-General in Council to make rules to regulate the licensing of medical officers, and the functions of those officers and of the officers of the ship generally, and ensure to the passengers free access to the upper deck.

C. P. ILBERT.

The 20th June 1883.

From Chamber to Government of Bengal.

Calcutta, 11th July 1883.

The Committee of the Chamber have had under consideration the Bill—with statement of Objects and Reasons—to amend the Native Passenger Ships Act, 1876, received with your letter No. 1384 of the 29th ultimo, and they direct me to say in reply to your reference that in their opinion the proposed measure contains no provisions to which exception can be taken.

INDIAN PORTS ACT OF 1875.

In this matter the opinion of the Chamber was requested by the Government of Bengal with reference to a proposed amendment of the Bill to the extent of giving to the Government of India, when it administered a Port Fund, the power of ordering payment of pensions out of that fund. In reply, the Committee stated that they considered the proposed amendment was not open to objection.

No. 2210.

Copy of the Bill and of the Statement of Objects and Reasons forwarded to the Secretary to the Bengal Chamber of Commerce, with the request that the Chamber will be good enough to favor the Lieutenant-Governor not later

than the 15th November next, with an expression of their opinion on the provisions of the Bill.

By order of the Lieutenant-Governor of Bengal.

(Sd.) C. W. BOLTON

Under-Secretary to the Government of Bengal.

CALCUTTA,
Genl. Dept., Marine,
The 2nd November 1883.

STATEMENT OF OBJECTS AND REASONS.

IT has recently been ruled by the Government of India in the Finance Department that service in establishments paid from port funds managed by the Government is qualifying service for pension, provided that the port fund pay for such service. It has now been brought to notice by the Government of Bombay that section 47 of the Indian Ports Act, 1875, which regulates the accounts of port-dues, does not authorize provision for pensioning employés either by investment of part of the port funds, or by the purchase of pensions from Government, or otherwise.

As it seems to the Government that, when it administers a port fund, it should have the power of ordering the payment of pensions out of that fund, the present Bill, which modifies section 47 of the Indian Ports Act so as to give the Government the desired powers, has been prepared.

C. P. ILBERT.

The 10th October 1883.

From Chamber to Government of Bengal.

Calcutta, November 12th, 1883.

I am directed by the Committee of the Chamber to acknowledge receipt of your letter No. 2210 General Department, Marine dated the 2nd instant, forwarding copy of a Bill to amend the Indian Ports Act of 1875, together with Statement of Objects and Reasons, and requesting the opinion of the Chamber on the provisions of the Bill.

In reply, I am desired to state that the Committee consider that the amendment proposed is open to no objection.

RULES UNDER SEA CUSTOMS ACT FOR COASTING VESSELS.

In further revision of the regulations relating to coasting vessels in the Bengal Presidency, the Collector of Customs submitted a report which was referred by the Board of Revenue to the Committee of the Chamber for their opinion of the draft rules proposed by that Officer; and the Committee pointed out what, in their judgment, was necessary to make the rules workable and convenient to the coasting trade.

From Board of Revenue to Chamber.

No. 439 *B. Calcutta the* 13*th April* 1883.

Customs.

H. A. Cockerell, Esq., C. S. I.

With reference to your letter dated 23rd January 1882, and the connect-

ed correspondence, I am directed to forward herewith copy of a further report from the Collector of Customs, Calcutta, together with revised draft rules for the Bengal Presidency, under section 157, Chapter XV of the Sea Customs Act VIII, of 1878, for the coasting trade, and to request that the Board may be favored with the opinion of the Chamber of Commerce on the subject.

Letter No. 101, dated 7th February 1883, and enclosure.

From Chamber to the Board of Revenue.

Calcutta, 13th June 1883.

I am directed to acknowledge the receipt of your letter No. 439 B, of the 13th of April, relative to the revised rules proposed for the coasting trade under Section 157, Chapter 15 of the Sea Customs Act VIII of 1878.

The Committee are glad to find that the recommendations submitted in their letter of 23rd January 1882 have been mainly approved; the Officiating Collector of Customs, however, has expressed his views on two of them, and the Board request the Chamber's opinion thereon.

As a means of relief to coasting vessels the Chamber proposed that at coast ports shippers should be allowed to place cargo in lighters and send it into the roads in readiness for steamer's arrival; and the Officiating Collector's view is that all goods may be so dealt with, except rice, the difficulty as regards that article being that until a vessel has entered outwards it is uncertain whether the rice will be dutiable or free.

With regard to this, the Committee desire me to say that they do not see any force in the suggested difficulty. Coasting vessels, as a rule, enter out for both foreign and Customs ports, and in granting passes, even after the vessel has entered out, the Collector has to accept the shipper's declaration as to the port to which the cargo is destined. They see no reason why this declaration on the part of the shippers should be thought of less value before than after the arrival and outward entry of the ship. Should Government, however, consider that there is extra risk, the Committee think that the imposition of an extra penalty in case of false declaration would probably meet the case, and as there is no doubt of the convenience which vessels will receive at coast ports if cargo is loaded into craft before vessels' arrival, the Committee trust their application may be allowed.

Rule 3, which provides for the discharge of cargo appears to the Committee to be unworkable.

It runs thus :—

"In the case of vessels, referred to in clause (*b*), section 162, that have touched at foreign ports or have on board dutiable cargo, the free cargo from Customs ports may be dealt with, as prescribed in rule 2, as soon as the dutiable cargo from Customs ports and all cargo from foreign ports, has been discharged."

Assuming that a vessel loading for Calcutta takes in part cargo at Colombo (a foreign port), then proceeds to Pondicherry (another foreign port) and takes in wines which are dutiable, and finally completes her loading at Coconada (a Customs free port) with free cargo, which,

of necessity, will be stowed on top of that previously loaded, on arrival at Calcutta this last cargo cannot be touched, under this rule, until the whole of the other cargo which is stowed underneath has been discharged. Consequently the concession granted by rule 2, *viz.*, that in the case of vessels coming from Customs ports only, and having on board no dutiable cargo, the cargo may be forthwith landed, is rendered inoperative in the case of vessels to which rule 3 applies.

The Committee would be glad to see permission given to deal with the free cargo, whether dutiable cargo is on board or not.

INSPECTION OF PRIME-MOVERS.

The opinion of the Chamber having been requested as to whether the Act (3 B. C. 1879) providing for the above should not be modified, since accidents attributable to these are far less serious than the explosion of a boiler, and since the overhauling of a prime-mover, moreover, would necessitate the stopping of work for a considerable time; the Committee, after having consulted competent judges on the subject, stated that they entirely agreed with the opinion expressed by the President of the Commission appointed to carry out the inspection under the Act, that inspection of prime-movers was un-

necessary, and that the Act should be amended accordingly.

From Government of Bengal to Chamber.

No. 4141E. *dated Calcutta the* 1*st December* 1883.

I AM drected to forward the accompanying copy of letter, No. 221 of the 28th September last, from the President of the Commissioners for the Inspection of Steam Boilers, relative to the inspection of prime-movers, and to request the favour of your opinion on the subject.

From H. L. HARRISON, ESQ., C. S., *President of the Commission for Inspection of Steam-boilers, to the Secretary to the Government of Bengal, Judicial Department.*

I HAVE the honor to report, for the information of His Honor the Lieutenant-Governor, that it was recently brought prominently to the notice of the Commissioners for the inspection of Steam-boilers, that whereas the Act [III (B.C.) of 1879] provides equally for the inspection of boilers and prime-movers, no action whatsoever is taken to inspect prime-movers, unless, as very occasionally happens, some glaring defect obtrudes itself upon the notice of the Inspector; but the inspection is limited to boilers.

2. While this appears to be a manifest breach of the Act, the opposite course is beset with most serious difficulties. Section 5 of the Act says that "such Inspector shall carefully examine such boiler or prime-mover and *every part thereof.*" Now, even in the case where there is

only one boiler attached to an engine or prime-mover, the examination required by the Act will be a much more formidable affair than it is at present, and parts of the machinery will require lifting; but in the very numerous large jute and cotton mills, in which there are several boilers, it will form a most serious impediment to business. These mills do not now stop their works for inspection. The boiler, which has to be inspected, is cooled down and put out of use for several days, but the work goes on without impediment. If the prime-movers are to be overhauled, everything must be stopped for a not inconsiderable period and complaints will be loud.

In the case of the municipal pumping, it will seriously affect the water-supply to the town while the examination is going on.

3. The Boiler Commission, therefore, under these circumstances, hesitate, without further orders, to carry out the Act. They believe that the inspection of prime-movers is not necessary, as an accident to a prime-mover is so far less serious in its effects than the explosion of a boiler. They would rather suggest that the Government should obtain the opinions of competent judges, and, if it is found, as they anticipate, that the inspection of prime-movers is deemed unnecessary, that the Act should be modified at an early date.

From Chamber to the Government of Bengal.

Calcutta, 26th January 1884.

I am directed by the Committee of the Chamber of Commerce to acknowledge the receipt of your letter No. 4141 E, of the 1st of December, relative to the inspection of prime-movers.

Your reference having been submitted for the opinions of competent judges and their replies being now before the Committee, I am directed to state that they appear to express a general concurrence in the views expressed by the President of the Commission for the inspection of Steam-boilers, *viz.*, that the inspection is unnecessary, and that the Act 3 of 1879 should be modified accordingly.

The reasons for the conclusion arrived at by the Commission are almost identical with those communicated to the Chamber by the parties who have been consulted, and the replies received by the Committee point to the serious difficulties which would attend the examination required by the Act ; the work at the mills would be stopped for days, the cost would be excessive, and the hurried putting together again of machinery that had been stopped when working satisfactorily would be almost sure to be attended with accidents.

It is the interest of persons in charge of engines to see that they are kept in the highest state of efficiency, and as such persons are experienced men, who have been especially trained to that work, every precaution is adopted by them to ensure perfect working and immunity from accidents. It therefore seems to the Committee of the Chamber that there is no call for the inspection of prime-movers in mills which are under such skilled European supervision, and that the clause in the Act relating thereto should be expunged.

ARREST OF PERSONS TO GIVE EVIDENCE BEFORE MARINE COURTS FOR TRIAL OF PILOTS.

From Government of Bengal to Chamber.

No. 2410—*Calcutta the* 19*th November* 1883.

In continuation of Mr. MacDonnell's letter No. 821, dated the 1st May last, I am directed to forward, for the information of the Chamber of Commerce, the accompanying slip containing an additional rule for insertion in the "Rules for the guidance of Running Pilots."

From Chamber to Government of Bengal.

Calcutta, 12*th December* 1883.

I am directed by the Committee of the Bengal Chamber of Commerce to acknowledge receipt of your letter No. 2410 $\frac{\text{General Department}}{\text{Marine}}$, dated 19th ultimo, forwarding for information of the Chamber an additional rule, for insertion in Chapter 13, Miscellaneous rules, of Rules for the guidance of Running Pilots, to the effect that—

"Pilots are directed to afford every assistance in their dower to any officer duly authorised by the Judge of the Court for the trial of Pilots to arrest any person or persons on board of an outward-bound vessel. The master of the vessel should, in the first instance, be advised to give up the person or persons for whom a warrant has been issued, and on his failure to comply with such demand, the Pilot should anchor the vessel in safety and communicate with the Port Officer. The vessel should

not, however, be delayed longer than is absolutely necessary to carry out these instructions.

With reference to this, I am directed to state that the Committee strongly deprecate any interference with the commander of a vessel, as commander, and consider further that the Pilots' duties should be restricted solely to the navigation of the ship.

From Government of Bengal to Chamber.

No. 49—*Calcutta the 5th January* 1884.

In acknowledging the receipt of your letter, dated the 12th ultimo, I am directed to say that the rule for the arrest of witnesses to give evidence before the Judge of the Marine Court for the trial of Pilots under Act XII of 1859, to which the Chamber havet aken objection, has been framed by the Lieutenant-Governor in accordance with the authority vested in him by Act VI (I. C.) of 1883, and that without such a rule it might sometimes be impossible to investigate charges against Pilots satisfactorily. Mr. Rivers Thompson, however, believes that it will seldom be necessary to detain a ship under the rule, and he does not anticipate that its existence will cause any appreciable inconvenience to the shipping generally.

I am to add that a similar power is given under the Customs Act, VIII of 1878, and that pilots are authorized to detain vessels if the masters, in spite of their remonstrance, persist in removing or receiving any goods otherwise than in accordance with the provisions of that Act.

HOSPITAL DUES FUND.

THE correspondence which is printed below was initiated by the Hospital authorities, who complained to Government of the inadequacy of the allowance of a rupee per day for the maintenance of each sick seaman, and of the difficulty of recovering even that allowance. With regard to the second point, the Committee regret that Government has ignored their suggestion that the duty of issuing the necessary certificate should be entrusted to the Port Health Officer and have instead appointed the Shipping Master.

It seems anomalous that while the Shipping Master is by Act V. of 1883 relieved of one of his principal duties on board ship, in order to more closely connect the Health Officer with the shipping, the Shipping Master should be charged by Government with the duty of issuing certificates relating to the medical treatment of seamen in hospitals, when the Medical Officer by whom he is relieved could so much better grant the certificate of need for hospital treatment. A reference to Chapter V of this Act will show that the Port Health Officer has been given special power to medically examine seamen on board, and the Committee still think his services should be utilised.

It would be interesting to learn how the money collected by Government under the heading of Hospital Dues has been disposed of. Judging from the returns of shipping entered at this port, the collections during the past few years must have amounted to at least some Rs. 75,000 annually, whereas less than one-half only of this sum could have been paid to the hospitals under the one rupee per head charge. The Committee regret that they have not been favoured with information as to the disposal of the large balance. It will be remembered that some years ago the Chamber questioned the action of Government in granting a donation of Rs. 10,000 from the Hospital Dues Fund to the Nurses' Institution. It was not that the grant itself was objected to, but it was considered that of the total sum required for the nurses, the Hospital Dues should have contributed an amount proportionate to the number of seamen as compared with the total admission into the hospitals. It is hoped that similar action is not now being taken in the matter of maintaining the Port Health Officer. This officer practically does nothing for the shipping, nor does he in any way treat medically the seamen in port. Vessels are just as much compelled now, as before Hospital Dues were collected from them, to engage the services of local medical men to attend cases of sickness on board. The Health

Officer's duties, with the exception above noted, appear analogous to those of Quarantine officers elsewhere, officers who are appointed for the public benefit and who, as far as the Committee's information goes, are not paid out of money collected by a special charge upon the shipping frequenting the port. The Committee fail to see why in this port the shipping should be charged with such an establishment; in the absence of precise information they can in no other way account for the Hospital Dues Fund being in deficit than by assuming it to be thus burdened. They would reiterate their opinion that all charges upon shipping not absolutely required are at this moment most inopportune.

It would seem that some omission has occurred in the wording of para 3 of the Government Resolution upon this correspondence. As it now stands, the Shipping Master has no option but to issue a certificate which will enable the Hospitals to recover charges upon any person who can show that at some period of his existence he served on board ship. Seeing the large number of men in Bengal who are not now seamen but who have so served, the Committee feel sure that the Government had no intention of charging their medical treatment to the Hospital Dues Fund, and the needful order to prevent this will no doubt be issued.

From Government of Bengal to Chamber.

No. 287 *Calcutta the* 9*th February* 1883.

In forwarding copies of the papers noted on the margin relative to the admission of sick seamen into the Calcutta Hospitals, and the debiting of the charges for their treatment to the Hospital Port Dues Fund, I am directed to observe that it seems to the Lieutenant-Governor that the present rules place too much power in the hands of masters of vessels, and that consequently hardship, fatigue and expense are often caused to sick seamen, while the revenue of the hospitals suffers inasmuch as, notwithstanding repeated applications, admission orders (without which no payments are made from the Hospital Port Dues Fund) are not unfreqently withheld. The changes in the existing procedure, indicated by the Board of Revenue, would no doubt tend to place matters on a more satisfactory footing; but any such alterations must necessarily result in an increase in the number of admissions to hospital, and consequently in the expenditure debited to the Hospital Port Dues Fund. This Fund is at present in deficit, and the maximum rate, one anna, fixed by section 59 of Act XII of 1875, is now levied. No increase in the receipts can therefore be expected from this source. The present hospital charge of one rupee per diem for the treatment of each patient is already pronounced inadequate by the Surgeon Superintendent of the General Hospital. It

Letter from the Medical and Municipal Department of this Office No. 929T—M, dated the 11th September 1882, with enclosure.
Letters from the Surgeon-General, Bengal—
(1) No. 9174, dated the 21st November 1882, with enclosure.
(2) No. 9293, dated the 23rd November 1882, with enclosure.
(3) No. 9688, dated the 8th December 1882, with enclosure.
Letter from the Board of Revenue, Lower Provinces, No. 22B, dated the 9th January 1883.

cannot therefore be reduced, and there seems to the Lieutenant-Governor to be no course open other than an amendment of the Act, which, by enhancing the rate of Hospital Port Dues, would enable the Fund to meet the extra charges that will fall on it, owing to the admission of larger numbers of sick seamen to the hospitals. Before, however, moving the Government of India to take any action in this direction, Mr. Rivers Thompson would wish to be favoured with an expression of the opinion of the Chamber of Commerce on the subject.

MAINTENANCE OF SICK SEAMEN FROM THE PORT DUES FUND—ADMISSION OF SEAMEN INTO HOSPITALS.

Memo. E. N. BAKER, ESQ., *Offg. Under-Secretary to the Government of Bengal, Medical and Municipal Department,—No.* 929 *TM, dated Darjeeling the* 11*th September* 1882.

COPY, with a copy of the letter to which it is a reply, and of its enclosures, forwarded to the General (Marine) Department of this office for information and for such action as may be considered necessary, with the remark that this Department generally concurs in the other recommendations of the Surgeon-General.

From E. N. BAKER, ESQ., *Offg. Under-Secretary to the Government of Bengal, Medical and Municipal Department, to the Surgeon General, Bengal.—No.* 928 *TM, dated Darjeeling the* 11*th September* 1882.

I am directed to acknowledge the receipt of your letter No. 6200, dated the 28th July last, forwarding with your remarks an application from the Superintendent, Presidency General Hospital, in which he proposes that certain changes should be made in the rules for the admission

into hospital of European seamen. Among other matters the Superintendent represents the inadequacy of the fee of Re. 1 per diem to cover the actual expenses of sick seamen in hospital.

2. In reply, I am directed to say that the present rate for sick seamen in hospital was fixed last year after full consideration, and the Lieutenant-Governor does not think it desirable to re-open the question.

3. The other proposals contained in Dr. Birch's letter will be considered in the General (Marine) Deparment of this Government.

From A. J. PAYNE, ESQ., M. D., *Surgeon-General for Bengal, to the Secretary to the Government of Bengal, Medical and Municipal Department, No.* 6200, *dated Calcutta the* 28*th July* 1882.

I have the honor to forward, for consideration and orders of Government, letter No. 316, dated 24th instant, and enclosures, received from the Superintendent, Presidency General Hospital.

2. With regard to Dr. Birch's specific representations I beg to observe as follows.—

1*st.*—The sanctioned fee of Re. 1 per seaman (*vide* correspondence ending with your Office No. 956, dated 17th August 1881) does not cover the cost of maintenance in hospital, and should the Lieutenant-Governor be disposed to consider the question of increase, an estimate of the cost shall be produced.

2*nd.*—It seems absolutely necessary, for the protection of such seamen and of the State, that admission

to hospital should no longer depend on the will of commanders of ships, but that illness certified in hospital should be regarded by the Shipping Master as a compulsory reason for *his* granting an order of admisson without reference to the commander.

3rd.—The wording of the rule regarding "great urgency" as the only justification for the reception of a seaman into hospital is certainly a mistake. It is vague and open to great variety of interpretation. If strictly observed, such a rule must forbid hospital treatment of many a sick man for whom it is indispensable.

4th.—For the rest, Dr. Birch's proposals appear to me to be reasonable and proper.

From E. A. Birch, Esq., M. D., *Offg. Surgeon Supdt., Presidency General Hospital, to the Surgeon-General, Bengal.—No.* 316, *dated Calcutta the* 24*th July* 1882.

I beg to report that the funds of this hospital are sustaining loss in consequence of the negligence of captains to send "admission orders" with sick seamen, or their omission to supply the defects when brought to their notice.

At present, as you are aware, the system is that a seaman coming to the hospital should bring with him an admission order signed by the captain of his ship, and this order is appended as a voucher to the nominal monthly bill which I submit to the Accountant-General on account of sick seamen treated in the hospital, and if any such admission order is not forthcoming the amount due

on account of the particular man referred to is objected to and deducted by the Accountant-General.

But it frequently happens that sick seamen, who have not got admission orders apply for relief at the hospital. In such cases our practice is—(1) to give the man a prescription if he is merely indisposed : (2) if suffering from illness, and yet is sufficiently strong to return to his ship without danger or hurt, we grant a certificate to the effect that the man is a fit subject for hospital treatment, and requesting that he be returned to the hospital with an admission order ; or (3) if the man is too ill to return without injury to his ship, he is admitted, and application is made for the admission order through the Shipping Master.

The second of these courses frequently entails hardship, fatigue, and expense to the sick men : but in the face of the note appended to the foot of the " order of admittance" (appended) we are obliged to adopt this plan, which involves exposure and a walk to and fro of, say, four miles ; or if the man can afford it (which is not often) he drives this distance. But, as a rule, the issuing of such a certificate is useless, in that the man seldom returns with the order asked for, though many of them, when questioned upon a second visit to the hospital, state they delivered the certificates signed by me to the captains of their ships without avail. Many men who appeal for relief at the hospital, and who really are ill, affirm that they had previously requested their captains to supply them with orders or to grant permission for them to visit the hospital, but that they met with refusal. Be this as it may, and without attaching too much importance to such statements

it seems to me that there is a grave error in a proceeding which places the fate of a man alleged to be sick wholly at the mercy of his captain, who, even if a humane disciplinarian, may easily commit an error of judgment upon a subject about which he is not capable of forming an opinion. In support of this I can quote cases. I have seen a captain angry because a man with advanced heart-disease was not handed over to him as "fit for duty;" and, on the other hand, I frequently get "admission orders" with men suffering from such trivialities as mosquito bites (judgment is limited by vision). Of course it may be objected that Surgeons attend ships while in the river, but the very bread of these medical men depends upon their ability to please the masters of vessels; wherefore, I submit, even when consulted by the captains, they are not independent judges. In proof I append a certificate given by one of their Surgeons, dated three days after the men alluded to had been in hospital, and after two Hospital Surgeons had certified that the men were unfit for duty and were fit subjects for hospital treatment.

It is, however, to the third procedure alluded to, I desire to invite special attention. When the condition of a sick sailor who applies for relief is such that we cannot, in common humanity and without risk, send him back for the admission order, he is detained for my personal inspection, and if I confirm the opinion of the admitting subordinate, I admit the man into hospital, and next day, through the Shipping Master, I apply for the "order of admittance." Frequently the order is never sent, though the man may remain for months under treatment. In such a case, and merely in consequence of the captain's

neglect in some instances, of his refusal, or of his determination to oppose in others, the State, and not the Port Trust Fund (*i. e.*, the ship), has to bear the expense, while the hospital is unjustly deprived of part of its legitimate revenue.

To show that I describe matters correctly, I will quote the following cases :—

1—J Downey of the *Glencastle* was admitted on the 26th May with fever, and he remained four days under treatment. Application for his order of admittance was made on 29th May.

2—N. Leitch of the *Benares*, admitted on 31st May for fever, was three days in hospital—order applied for on 2nd June.

3—J. Burke of the *Clan Mackay*, admitted on 5th June for syphilis, nine days in hospital—order applied for on 6th June.

4.—W. Smith of the *Clan Mackay*, admitted on 5th June, was 21 days in hospital for hipatitis—order applied for on 6th June.

5.—W. Thomas of the *Clan Mackay*, was 21 days in hospital for fracture from 9th June—order applied for on 10th June.

None of these orders were ever received, and thus the hospital revenues suffered to the extent of Rs. 58 in the cases of these five men, and I have no redress !

Formerly the Shipping Master used to supply deficient orders direct from his office ; now (and with the sanction

of the Board of Revenue, No. 486 of 10th June 1882) he no longer does so.

But this is not all. It sometimes happens (and I append proof) that men who come to the hospital from the shipping, when on liberty or otherwise, and who may be detained there as being too ill to return to their ships for the orders, are logged as deserters—a proceeding which renders it impossible for the hospital ever to recover its dues, and one by which, I believe, the men forfeit all wages, &c. In the case of the *Clan Mackay* the documents appended will confirm this statement. It will be noted that the men were admitted into hospital on the day they left the ship ; the captain knew where they were, for application was made for their orders on the 6th, and yet he logs them as deserters ! Repeated and futile applications were made for the admission orders of these men before the ship left the port, proving the determination of the captain to resist and oppose in every way.

Assuming that a man so logged becomes a chronic invalid, he is thrown as a pauper upon the country, for as a deserter he cannot claim a passage home as a distressed seamen under the Board of Trade Rules.

It is quite clear that some captains regard the hospital as an institution hostile to their interests, and they behave accordingly ; whereas in reality the hospital largely protects masters of vessels in ways they know not of. Almost daily we turn away seamen who either are trying to malinger or to make the most of trivial ailments with the object of evading work or changing ships, and thus the hospital helps to uphold discipline. Some captains look upon a seaman as a machine from which a certain amount

of work is to be got, and they wont believe in illness unless it affects themselves personally. But if we see some cruelty on the part of masters of vessels, we also see many attempts at malingering on the part of their men, and it is my duty to be alive to both. To do so is not difficult. It is merely necessary to decline to listen to either side, and to judge each case purely upon its medical merits. This is what is done, and such are my instructions to the resident medical officers, who have accurately carried out my wishes. The hospital merely protects seamen who are really ill, as is its duty ; but some captains wish me to accept their opinions as to the nature of illnesses, and this I decline to do. If a captain wishes to get rid of a man, he sometimes endeavours to utilize the hospital. Here is an example. The captain of the ship *Idomené* came to the hospital on 12th July to enquire about James Brown of his ship. I inspected the man in the captain's presence, and pronounced him fit to go to sea and to work ; whereupon the captain became noisy, saying, he "did not want such an useless fellow," and that the man was "rotten from syphilis" (he had no signs of syphilis). I had to request the captain not to make a noise in the ward, and he withdrew saying, "Now the Shipping Office wont allow me to discharge the man." He did however succeed, for the man returned next day for a slight cut upon his foot discharged from his ship. I merely mention this incident to indicate the spirit which pervades some captains of vessels *viz.*, that the hospital is in all cases to be made use of to serve their ends.

It would be impossible to persuade many captains that it is not easy to malinger ; that a man cannot feign a heart disease, or a dysentery, a pneumonia or phthisis,

anything more easily than he can assume a fracture or a wound; but to imagine, as is the impression in interested quarters, that 80 or 90 per cent. of the seamen who are admitted into hospital are malingerers amounts simply to an absurdity. I lay stress upon this because it is astonishing to what an extent this error is cherished.

In connection with the subject of this letter I append for your inspection specimens of the forms of certificate of inability to proceed to sea and of discharge from hospital.

Among other matters to which allusion is made in this letter, I particularly wish to bring forward the following points:—

1—The inadequacy of the fee of Re. 1 per diem to meet the hospital expenses of sick seamen.

2—Some modification of the system under which the "order of admittance" is issued, by which the hospital funds will be protected; or the abolition of this document altogether as being unnecessary. Should not a certificate, signed by a surgeon of the hospital, be held sufficient to oblige the Shipping Office to verify the fact that the man named belongs to the ship named, and should not this verified certificate be held sufficient authority upon which to recover hospital dues?

3—Am I to obey in its literal sense the foot-note to the order of admittance, and refuse to receive all seamen who present themselves without

orders, except in "cases of great urgency"? If so, I would ask for a definition of the phrase.

4—Should not some means be devised by which sick seamen would have greater facilities of coming to hospital? At present it wholly depends upon the will or caprice of the captain. If, suppose, captains were compelled to log all such refusals, would it not constitute a wholesome check?

5—I would suggest that all communications between masters of vessels and the Superintendent of this hospital as to the fitness of men to proceed to sea be made in writing through the Shipping Office, in order to obviate the disagreeableness of interviews with captains of a certain class and to place on record actual occurences of importance.

6—I would suggest that the certificate of inability to proceed to sea be modified by the removal of the words "unable to proceed to sea," and the substitution of the words "unfit for work as a sailor at sea." To the foot of the certificate of discharge should be added the words "special recommendation;" for instance, it might be highly desirable to recommend a week's light work, and so forth.

7—The wages of seamen who are admitted for venereal affections are stopped for the period they are in hospital. The system is bad, as it prevents diseased men declaring themselves, very often till their systems are ruined, and such men fall as

a burthen upon the community; nor can the practice be defended upon moral grounds, in that the sin does not lie in the acquirement of the disease, but in the act which led to the disease. The least guilty are frequently the greatest sufferers.

From Board of Revenue to Government of Bengal,—

No. 22B, dated Calcutta the 9th January 1883.

I am directed to acknowledge the receipt of Government order, No. 385TG, dated 16th September last, forwarding a copy of a letter from the Superintendent of the Presidency General Hospital, and requesting an expression of the Board's opinion on the representations made by Dr. Birch in regard to the admission of sick seamen into the Calcutta hospitals, and the debiting of the charges for their hospital expenses to the "Hospital Port Dues Fund."

H. A. COCKERELL, ESQ., C.S.I.

2. The specific matters to which Dr. Birch's letter more especially refers, and on which the opinion of the Board is required, are the following :—

(*a*)—Whether the system under which the "order of admittance" is issued, should not be modified with a view to the protection of the hospital funds, or whether the document in question might not be dispensed with as being unnecessary. Whether a certificate signed by a Surgeon of the hospital should not be held sufficient to oblige the Ship-

ping Office to verify the fact that the man named belongs to the ship named, and such verified certificate be held sufficient authority upon which to recover hospital dues?

(*b*)—Should the hospital authorities obey in its literal sense the foot-note to the order of admittance and refuse to receive all seamen who present themselves without orders except in "cases of great urgency?" If so, a definition of the phrase is required.

(*c*)—Should not some means be devised by which sick seamen would have greater facilities of coming to hospital? At present it wholly depends upon the will or caprice of the captain. If, suppose captains were compelled to log all such refusals would it not constitute a wholesome check?

(*d*)—Dr. Birch suggested that all communications between masters of vessels and the Superintendent of this hospital as to the fitness of men to proceed to sea be made in writing through the Shipping Office, in order to obviate the disagreeableness of interviews with captains of a certain class, and to place on record actual occurrences of importance.

(*e*)—Suggests that the certificate of inability to proceed to sea be modified by the removal of the words "unable to proceed to sea," and the substitution of the words "unfit for work as a sailor at sea." To the foot of the certificate of discharge should be added the words "special recommendation;" for instance, it might be highly desirable to recommend a week's light work, and so forth.

(*f*)—The wages of seamen who are admitted for venereal affections are stopped for the period they are in hospital. Dr. Birch considers this system a bad one, as it prevents diseased men declaring themselves, very often till their systems are ruined, and such men fall as a burthen upon the community; nor can the practice, Dr. Birch thinks, be defended upon moral grounds in that the sin does not lie in the acquirement of the disease, but in the act which led to the disease. The least guilty, it is said, are frequently the greatest sufferers.

3. With reference to the proposal made by Dr. Birch for a modification of the system under which the "order of admittance" into hospital is issued, I am to observe that, under the rules as they now stand, the Shipping Master has no authority to grant "admission orders" to sick seamen. This view of the rules was held by the Board in their letter No. 486B., dated 10th June 1882, and approved by Government in Government order No. 979, dated 4th July 1882. If, however, as the Board believe is the case, the disposal of the hospital port dues rests with Government, it is open to Government to allow them to be paid to the hospitals on admission orders signed by the Shipping Master, should Government think fit to do so. For the reasons advanced in Dr. Birch's letter, the Board would approve of the proposal that the certificate by a hospital surgeon, verified by the Shipping Master in regard to the fact that the man named belongs to the ship named, should be held sufficient authority to admit of the hospital authorities recovering hospital dues from the fund. This procedure would apply to cases of

seamen who have been received into hospital without admission orders from their commanding officers, and no change in the system under which captains of ships are at present authorized to grant admission orders is required, or seems advisable.

4. Referring to proposal (*b*), the Shipping Master is of opinion that only cases of great urgency should be admitted without an admission order from the captain, as otherwise the hospitals will be looked upon by discontented sailors as a means of escape from their duty. From several cases, however, which have lately come to the notice of the Board, and the instances mentioned by Dr. Birch, it is evident that the judgment of masters of vessels in regard to the state of health and medical needs of their seamen cannot always be depended upon, and it certainly seems safer that the decision of the scientific authorities of the hospital should be accepted on these points rather than the dictum of the masters of vessels. If the hospital surgeons are careful to be on their guard against attempts to malinger in all cases where seamen apply for medical assistance unprovided with admission orders, there seems no reason to apprehend a misuse of the hospital in this respect. In the Board's opinion there is no necessity for any change in the wording of the footnote to the form of admission order; but they think that it will be sufficient if instructions are issued to the hospital authorities to the effect that "cases of great urgency" should be understood to include only cases in which, in their opinion, the retention of the seaman for treatment as an indoor patient is absolutely necessary. The necessity of such treatment should, the Board think, in each case be left to the judgment of the hospital surgeons, and in

forming such judgment there seems no reason why a seaman should be looked upon in a different light to any other sick person who applies for medical aid.

5. In regard to proposal (*c*) I am to say that, judging from some of the cases which have lately come before them, it certainly seems to the Board expedient that some means should be devised by which seamen who are really in need of medical aid should have greater facilities than at present of applying to the hospitals for such treatment as their cases may require. As the law now stands, it is not very clear what remedy a seaman has to whom permission to consult a hospital surgeon is refused by his captain. Section 232 of the English Merchant Shipping Act of 1854, gives a seaman a right of complaint to a Magistrate; but it seems doubtful whether the jurisdiction of the Magistrate would extend to passing an order allowing a seaman to go to hospital. Such a procedure, at best, would be a circuitous one, and even if it be legally competent to a Magistrate to pass orders in such a case, medical evidence should be required to enable him to come to a decision. On the whole, the Board would be inclined to prefer that the question of whether a seaman needed hospital treatment should be decided directly by the hospital authorities, and that provision should be made in the law, making it incumbent on ship masters to permit their seamen to go ashore, or to be sent ashore in proper custody (see section 232), so that they may be enabled to receive medical advice at the hospital.

9. As regards proposal (*d*), the Board are of opinion that a rule to the effect that all communications between the masters of vessels and the hospital authorities be

made through the Shipping Office, would only tend to delay, and would unnecessarily increase the work of the Shipping Office. There can, however, be no reason why a captain should not, at the discretion of the Superintendent, be required to communicate in writing direct with the hospital authorities; writing materials could be given him at the hospital for the purpose if the medical officer in charge wished to avoid a personal interview.

7. The suggestion made by Dr. Birch for a modification of the certificate of inability to proceed to sea appears to the Board to be unobjectionable. In regard to the last proposal, I am to observe that the law is more general in its terms than might be inferred from Dr. Birch's letter. In section 8 of 30 and 31 Vict., cap. 124, it is laid down that "where a seaman is by reason of illness incapable of performing his duty, and it is proved that such illness has been caused by his own wilful act or default, he shall not be entitled to wages for the time during which he is, by reason of such illness, incapable of performing his duty." The Board are of opinion that as far as the question is considered as one between seamen and their employers, there can be no reason for any modification of the above rule. It rests with Government to say whether, having regard to the general interest of the community, the wages of seamen while under treatment for venereal disease should be paid from the public purse. To the Board there seems no particular reason why seamen should, in this respect, be treated differently to any other class of workmen.

From A. J. PAYNE, ESQ., M D., *Surgeon-General for Bengal to the Secretary to the Government of Bengal, Medical and Municipal Dept.—No.* 9174, *dated Calcutta the* 21*st November* 1882.

IN continuation of this office letter No. 6200, dated 28th July last, I have the honour to forward in original letter No. 523, dated 17th instant, with enclosure, received from the Superintendent, Presidency General Hospital, for orders.

From E. A. BIRCH, ESQ., M.D., *Officiating Surgeon-Superintendent, Presidency General Hospital, to the Surgeon-General for Bengal.—No.* 523, *dated Calcutta the* 17*th November* 1882.

HEREWITH I have the honour to send in original the Deputy Shipping Master's No. 842 of 14th November, forwarding a letter from the Master of the ship *Eulomene*.

The case under discussion is one of importance, and I beg to solicit orders on the subject—Is a captain justified in refusing an order of admission because one of his crew happens to be brought to hospital by the police? I must confess I cannot see why the hospital should be deprived of its dues under these circumstances.

In a previous communication (my No. 316, dated 24th July 1882), I have shewn that the hospital is entirely at the mercy of captains of ships in this matter of hospital fees for sailors.

In the present case (as in many others) it is pretty evident that the captain is endeavouring to relieve his feelings towards his misbehaving seaman by putting the hospital to as much inconvenience and expense as

possible. To issue the "admission order" would cost the captain nothing (he still pays his hospital port dues), but he has the satisfaction of knowing that he has it in his power to inflict a fine upon the hospital.

From the Master of the ship Eulomene, to the Shipping Master, Calcutta,—dated Calcutta the 7th November 1882.

I RECEIVED your notice on Saturday the 4th November, at 5-30 P.M., through Messrs. Turner, Morrison & Co., my Agents, informing me that John Collins, able seaman, was admitted into the General Hospital on the 29th October last. The said John Collins received two hours' liberty from my Chief Officer on the 28th October, and up to date has not returned to his duty. From information I have gathered, I understand that he was taken in custody by the police on the evening of the 28th October, for being drunk and disorderly, and from the police office taken to hospital. As I considered he is still in charge of the police, I decline to grant you the order asked for.

Memo. by H. ELLIS, ESQ., *Deputy Shipping Master.—No.* 842, *dated Calcutta the* 14*th November* 1882.

COPY forwarded to the Surgeon-Superintendent, Calcutta General Hospital, with reference to his memorandum No. 490, dated 30th ultimo.

From A. J. PAYNE, ESQ., M D., *Surgeon-General for Bengal, to the Secretary to the Government of Bengal, Medical and Municipal Dept,—No.* 9293, *dated Calcutta the* 23*rd November* 1882.

IN continuation of this office letter No. 9174, dated 21st instant, I have the honour to forward, in original, letter No. 524, dated 18th idem, received from the Superintendent, Presidency General Hospital, for orders.

From E. A. BIRCH, ESQ., M.D., *Officiating Surgeon-Superintendent, Presidency General Hospital, to the Surgeon-General for Bengal.—No.* 524, *dated Calcutta the* 18*th November* 1882.

I HAVE the honour to represent that many sailors who have recently been discharged from ships and who have taken up their residences at boarding-houses, come to this hospital and are treated herein, but as there is no admission order with these men, the hospital cannot recover any fees.

It is to be observed, that these men are sailors actually on the strength of the working seamen of the port.

If, for instance, after discharge from a ship, A goes to the Sailors' Home and B goes to a boarding-house, I receive an admission order with A, but none with B.; in other words, the hospital receives its fees for A, but not for B.

I am anxious to know whether this anomalous state of things which affects our income cannot be rectified.

Speaking roughly, the hospital suffers to the extent of about Rs. 300 a month in this way.

From A. J. PAYNE, ESQ., M.D., *Surgeon-General for Bengal, to the Secretary to the Government of Bengal, Medical and Municipal Dept.—No.* 9688, *dated Calcutta the 8th December* 1882.

IN continuation of this office letter No. 9293, dated 23rd ultimo, I have the honour to forward, in original, letter No. 568, dated 6th instant, received from the Superintendent, Presidency General Hospital, for orders.

From SURGEON-MAJOR, E A. BIRCH, M.D., *Officiating Surgeon-Superintendent, Presidency General Hospital, to the Surgeon-General for Bengal.—No.* 568, *dated Calcutta the 6th December* 1882.

REFERRING to my letter No. 316, dated 24th July 1882, and to my No. 523 of 17th November and No. 524 of 18th November 1882, I have the honour to state that on the 3rd instant a seaman named John Creatin, of the Ship *Thunderbolt*, came to this hospital for advice. I examined the man and gave him a certificate addressed to the captain, stating that the man was ill and unfit for duty, but could not be admitted for want of an order of admittance.

Yesterday (4th) the man came again, still without an order, saying that he had delivered the certificate and that the captain had instantly torn it up and ordered him to go to his work. I of course could not admit the case, as it was not one of "great urgency," there being no "order" from the captain.

I merely bring forward the case as a present example of the state of affairs alluded to in my former letters and in support thereof.

From Chamber to the Government of Bengal.

Calcutta, 30th May 1883.

In acknowledging receipt of your letter No. 287, (Marine,) dated the 9th February last, I am instructed by the Committee of the Chamber of Commerce to express their regret that a reply should have been so long delayed.

In the absence of information as to the mode in which the inadequacy of the charge of a rupee per day for each seaman *treated* at the hospitals is arrived at, and generally as to the state of the hospital accounts, the Committee find it difficult to take up this portion of the correspondence submitted to them. A rupee a day, however, appears to them, when considering the large daily total of cases treated, to be ample allowance if economy be practised in the hospital management, and the Committee are confirmed in their opinion by noticing, in previous correspondence, a statement that prior to 1877 the Howrah hospitals were content with a daily allowance of 13 annas. Whether the items charged against this allowance are fairly charged, or if they include grants such as the Committee upon a previous occasion considered should have been more fairly debited to the general revenues, is a question which can only be answered after a very complete examination of all the accounts connected with the hospitals; but, however this may be, the Committee feel that they cannot too strongly deprecate any increase in the charge upon shipping, and although they have already, upon more than one occasion, urged upon Government the absolute need

for reduction, to the utmost extent possible with efficiency, of all charges upon shipping, charges which ultimately fall upon the trade of this port, they would once again most respectfully beg to record their opinion that an enhancement of charges upon shipping, whether in the form of hospital dues, mooring rents, transporting, hauling, or indeed in any form whatever, is prejudicial to the best interests of this port.

The Committee notice with regret the state of tension which appears to exist in the relations between the hospital authorities and the masters of vessels. Granted that some of those who command vessels which trade to this port are difficult to deal with, a state of things which would justify a proposal that all communications between masters of vessels and the medical authorities shall be in writing reflects somewhat upon the latter; and the Committee would fain hope that with a little tact more pleasant relations may be established, and the need for pressing such a proposal pass away. The experience of agents in Calcutta is, that as a class, masters are not unreasonable if reasonably dealt with, but it must be galling to any one to be met in the spirit of the remarks made upon shipmasters in your annexure from Dr. Birch. As regards what is stated on the subject of absentees being logged as deserters, the Committee are informed that a master has no option but to so log and report a man if he is absent without leave, or if he overstays his leave. Under the Indian Merchant Shipping Act, a master who fails to report within 48 hours as a deserter any seaman who is absent from his ship without permission, incurs a penalty of Rs. 100, or of one month's imprisonment, or of both.

The hospital authorities, not content with their attack upon masters of vessels, appear to question the conduct of the river surgeons, but in so doing they overlook the obvious retort that the hospitals are always anxious to get seamen under hospital treatment, as they are about the only paying patients they do get, and, besides, that this class of patients improves the working statistical averages of the hospital.

Cases have been cited to the Committee proving that men who might well have been at work were kept in hospital, but as it is admitted that malingerers do exist among the seamen, it appears undesirable to increase the length of this communication by repeating them, but they would submit for the consideration of Government a proposal that—

1, all men who are capable of light work on board, or 2, all who could equally well be attended on board should not be detained in the hospitals, but should be sent to their vessels with a certificate, stating the course of treatment to be followed and the nature of the work of which they are capable. The river surgeons and the officer proposed to be appointed under the new Merchant Shipping Act might be directed to see that these recommendations were carried out. In this Act it is proposed that this officer is to have the power of medically inspecting and examining seamen and apprentices and of inquiring into complaints made by them; he is also to be authorised to inspect books and documents on board of ships in investigating complaints. It appears to the Committee that no authority would be better qualified than this officer to grant the certificates for admission to

hospital, but only in cases where such certificates are refused unreasonably by any master.

To meet an objection that this officer could not daily visit every ship in port, it has been suggested that a letter-box be placed at Fort Point, into which all complaints could be deposited. This box might be cleared early every morning and its contents taken on board the health boat, to meet the officer on his going on board. In order to efficiently perform such duties, it would appear to the Committee essential that this officer should have had experience, whether in the navy or merchant service, in dealing with seamen.

The Committee are opposed to the view advanced by Dr. Birch in regard to men who are incapacitated by their own default. In all ordinary sickness a seaman occupies a position differing from every other class of workman, in so far that he receives full wages and free hospital treatment during his sickness. The law is clear that only when the illness is the result of his own wilful act can his pay be stopped. The Committee are of opinion that it should be the duty of the hospital authorities to furnish such certificates as would enable the shipowner to stop so much of the seaman's wages as to cover the cost of his hospital treatment in Calcutta. In this way a debauched seaman would pay for his own treatment and be no longer a charge upon the hospital dues fund.

RESOLUTION.

Calcutta the 1st December 1883.

READ—

Previous papers regarding the admission of sick seamen into the Calcutta and Howrah Hospitals, and the debiting of the charges for their treatment to the Hospital Port Dues Fund.

Read also the undermentioned papers on the subject—

(1) Letter from the Surgeon-General, Bengal, No. 6200, dated the 28th July 1882, with enclosure.

(2) Letter from the Surgeon-General, Bengal, No. 9223, dated the 23rd November 1882, with enclosure.

(3) Letter to the Board of Revenue, Lower Provinces, No. 385T—G, dated the 16th September 1882.

(4) Letter from the Board of Revenue, Lower Provinces, No. 22B, dated the 12th January 1883.

(5) Letter to the Bengal Chamber of Commerce, No. 287, dated the 9th February 1883.

(6) Letter from the Bengal Chamber of Commerce, dated the 30th May 1883.

In the Resolution dated the 18th October 1875, the Government laid down the following rules, in addition to the rule already existing, which provided that no seaman should be admitted into hospital for treatment chargeable to the Hospital Port Dues Fund, except in cases of great urgency, unless he could produce a printed form of admission order signed by his commanding officer :—

(1) That the Hospital authorities should report the admission of any seaman, unprovided with an admission order, within 24 hours, to the Shipping Office, so that the latter may ascertain, if necessary, the ship to which the invalid belongs.

(2) That the agents of the ship should be informed by the Shipping Office in what hospital the seaman is lying, and also that, upon the receipt of information, if possible seven days previous to the probable date of the departure of the vessel, the Hospital authorities should be requested to state whether the seaman will be fit to resume his duty.

(3) That if the report shows that the seaman can do his duty, he should be shipped, and the ship relieved from further liability on account of his being in hospital. If he is unfit for duty, the usual course should be adhered to.

In July 1882, the Hospital authorities, represented, through the Surgeon-General, Bengal, that much inconvenience results from the present system under which seamen are admitted into hospital, and urged the necessity for adopting such measures as would place matters on a more satisfactory footing. It was urged that a change in the rules was needed in the interests of sick seamen as well as of the hospitals, inasmuch as admission orders are frequently refused to seamen on insufficient grounds, while without such orders the hospitals cannot recover their charges from the Hospital Port Dues Fund. These reasons satisfied the Lieutenant-Governor that there were grounds for revising the existing practice, and he accordingly consulted the Board of Revenue and the Bengal Chamber of Commerce as to the alterations which

were desirable. Their replies having been received and considered by the Lieutenant-Governor, he now approves the following additions to the rules, and directs that they be adopted at once :—

(1) In cases of seamen received into hospital without admission orders signed by their commanding officer, the certificate by a hospital surgeon, verified by the Shipping Master that the seaman named belongs to the ship named, shall be held to be sufficient authority to allow of the Hospital authorities recovering the charges due for his treatment from the Hospital Port Dues Fund.

(2) "Cases of great urgency," mentioned at the foot of the admission order, shall be understood to include only cases in which, in the opinion of the Hospital authorities, the retention of seamen appearing without the admission order for treatment as in-door patients is absolutely necessary.

(3) In the case of seamen from boarding-houses who are received into hospital without an admission order, and the cost of whose medical treatment ought to be debited to the Hospital Port Dues Fund, the Hospital authorities should submit a statement to the Shipping Master, showing—

(1) The name of the seaman.

(2) His age and place of birth.

(3) The name of the last ship from which he was discharged.

(4) The date of his leaving the ship.

(5) The cause of his leaving the ship, with such particulars as can be gathered from the man, together with an application for an admission order.

The Shipping Master will thereupon issue an admission order for the man, which will enable the Hospital authorities to recover the hospital charges from the Fund in the usual way.

The Lieutenant-Governor also agrees that the words "unfit for work as a sailor at sea" should be substituted for "unable to proceed to sea" in the certificate of inability to proceed to sea which is granted by the Hospital authorities. To the foot of the certificate of discharge should also be added the words "special recommendation," to provide for cases in which the Hospital authorities may think it desirable to recommend light work for a short period.

The Superintendent of the hospital may also exercise his discretion in requiring the captain of any vessel who calls to see him, or any other member of the hospital staff, regarding a seaman, to communicate his remarks in writing, materials for this purpose being provided at the hospital.

ORDER.—Ordered that a copy be forwarded to the Secretary to the Board of Revenue for the information of the Board, and for communication to the Shipping Master, to the Surgeon-General, Bengal, for information and for communication to the Superintendents of the several hospitals in Calcutta and Howrah, into which seamen are admitted, for their information and guidance;

to the Secretary to the Bengal Chamber of Commerce for the information of the Chamber and for communication to the shipping; and to the Medical Department of this office for information, with reference to its endorsement No. 929T—M, dated the 11th September 1882.

By order of the Lieutenant-Governor of Bengal,

A. P. MACDONNELL,

Offg. Secretary to the Government of Bengal.

No. 2505.

Copy forwarded to the Secretary to the Bengal Chamber of Commerce, for the information of the Chamber and for communication to the shipping.

By order of the Lieutenant-Governor of Bengal,

C. W. BOLTON,

Under Secretary to the Government of Bengal.

CALCUTTA,
The 1st December 1883.

PILOTAGE RECEIPTS AND DISBURSEMENTS.

IN the Chairman's address to the Chamber at the half-yearly meeting, held on the 7th August last, it was stated that the Committee, in a letter, dated 28th November 1882, had asked Government for an account showing how the inward and outward pilotage, lead money, hospital dues, &c., are appropriated, with a view to ascertaining that

the shipping interests are not called upon to contribute more than is essential to maintain the Pilot Service, in all its departments, in the highest state of efficiency. A reply to this letter, dated 21st September 1883, has now been received, with an account showing receipts and charges for the year 1881-82, and stating the willingness of the Lieutenant-Governor of Bengal to receive and consider any remarks the Chamber may desire to make, and, if possible, to give effect to them from the beginning of the next financial year.

The accounts submitted for 1881-82 showed a surplus of receipts over expenditure of Rs. 94,819-13-3, and in acknowledging the receipt of these the Committee thanked the Lieutenant-Governor for his expressed readiness to consider any suggestion they might have to make, and requested they might be further favoured with similar accounts for the three years prior to 1881-82 and for the year subsequent, as well as for information as to how the credit balance of each year had been dealt with.

The reply to this stated that the labour involved in re-casting these accounts, even for the single year for which they have been supplied, was so great, that the Lieutenant-Governor regretted his inability, under the extreme pressure of work, existing and prospective, in the Bengal Office,

to comply with the Chamber's request. Continuing the correspondence, the Committee stated that they had no wish to put Government to the trouble of re-casting accounts for past years, but would be content if they might be favoured with the approximate balances of those years, and how the same have been applied, adding that in their opinion the large surplus shown in 1881-82 was evidence, that the charges in question were excessive and capable of material reduction, and that the pilotage accounts for a series of years past must have exhibited considerable balances. To this last letter no reply has yet been received.

From Government of Bengal to Chamber.

No. 879 $\frac{T}{G}$, *Darjeeling the* 21*st September* 1883.

WITH reference to Mr. Wood's letter of the 28th November 1882, I am directed to forward, for the information of the Chamber of Commerce, the accompanying copy of a statement shewing the receipts and charges on account of pilotage for the year 1881-82. The Lieutenant-Governor will be glad to receive and consider any remarks that the Chamber may desire to make; and, if possible, to give effect to them from the beginning of the next financial year.

Revised Statement of the Pilotage Receipts and Charges for the Year 1881-82.

Statement showing the Receipts and Charges on account of Pilotage for the Port of Calcutta during the year 1881-82.

Receipts.	Rs.	A.	P.	Remarks.
Pilotage Receipts	8,41,859	1	0	
Lead Money	13,347	1	0	
Miscellaneous	15,437	11	0	
Hire of the Steamer *Undaunted.*	2,460	0	0	
Total Rs. ...	8,73,103	13	0	

Statement showing the Receipts and Charges on account of

Receipts.				Remarks.
Port Officer's Department.	Rs.	A.	P.	
Port Officer	19,354	13	6	
Assistant Port Officer ...	10,800	0	0	
Clerks and Servants ...	15,644	0	0	
Rent	6,512	6	0	
Contingencies	4,022	11	8	
Service Postage Stamps ...	200	8	6	
Value of Mathematical Instruments	132	10	0	
Dockyard Service and Supplies	115	10	3	
Travelling Allowance ...	88	0	0	
	56,870	11	11	
Marine Court.				
Judge	2,400	0	0	
Pilotage, Pilot Establishments and Vessels.				
Branch, Master and Mate Pilots' Allowances	53,207	2	3	
Volunteer and Leadsmen's Allowances	20,785	4	2	
Ditto Lead Money ...	3,212	8	0	
Pilotage Allowance to Free List Pilots	3,17,223	7	8	
Do. Licensed Pilots ...	1,54,932	11	10	
Pilot Vessels	46,560	6	4	
Steamer *Undaunted.* ...	11,132	11	0	
Value of Medical Stores ...	27	15	11	
Carried over ..	6,66,35	5	1	

Pilotage for the Port of Calcutta during the year 1881-82.

Receipts.	Rs.	A	P.	Remarks.
Brought forward ...	8,73,103	10	0	
Carried over ...	8,73,103	10	0	

Statement showing the Receipts and Charges on account of

Receipts.					Remarks.
		Rs.	A.	P.	
Brought forward	...	6,66,352	15	1	
Moiety of 7th Crew	...	2,200	0	0	
Surgeon at the Sandheads	...	5,678	13	1	
Mess, Passage and Miscellaneous		17,968	14	5	
False Point Light-House.					
Dockyard Service and Supplies		1,900	0	0	
Building and Repair of Ships (Personnel.)					
Steamer "Undaunted"	...	206	15	5	
Pilot Vessels	...	9,282	2	3	
Building and Repair of Ships (Materials.)					
Steamer "Undaunted"	...	3,488	11	10	
Pilot Vessels ...	...	24,783	6	3	
Victuals for Crews of Ships and Vessels.					
Steamer "Undaunted"	...	1,924	8	6	
Pilot Vessels ...	...	8,68[illegible]	1	6	
Coals supplied to Ships and Vessels.					
Steamer "Undaunted"	...	7,825	0	0	
Pilot Vessels ...	...	1,351	0	0	
Miscellaneous.					
Hire of Moorings for Sea-going and Inland Vessels.	...	1,781	1	8	
Carried over	...	7,53,431	10	0	

Pilotage for the Port of Calcutta during the year 1881-82.

Receipts.	Rs.	A.	P.	Remarks.
Brought forward ...	8,73,103	13	0	
Total ...	8,73,103	13	0	
Less expenses incurred during the year	7,78,283	15	9	
Balance at credit on the 31st March 1882	94,819	13	3	

Statement showing the Receipts and Charges on account of Pilotage for the Port of Calcutta during the year 1881-82.

Charges.	Rs.	A	P.	Remarks.
Brought forward ...	7,53,431	10	0	
Harbour Master's fees for Sea-going and inland vessels ...	1,603	0	0	
Fees to Masters of Merchant vessels for sitting on Courts of Enquiry	175	0	0	
Miscellaneous	1,050	0	0	
Miscellaneous Boats.				
Port Officer's Gig	1,008	0	0	
Steam Launch "*Calcutta*" ...	1,080	0	0	
Dockyard services and supplies	1,635	2	2	
Tidal Semaphores ...	3,315	8	0	
Cost of Telegrams	3,530	8	0	
Allowance to Port Commissioners for collecting Marine dues	2,800	0	0	
Miscellaneous (Port approaches)	3,682	8	5	
Cost of Stores from England ...	4,972	11	2	
Total Rs. ...	7,78,283	15	9	

* This amount represents the value of a Whistling Buoy which is in now more for future use.

From Chamber to Government of Bengal.

Calcutta, November 8th 1883.

I have the honor to acknowledge receipt of your letter No. 879 $\frac{T}{G}$, General Department (Marine), dated 21st September last, forwarding for information of the Chamber copy of a statement showing the receipts and charges on account of pilotage for the year 1881-82, and stating that the Lieutenant-Governor will be glad to receive and consider any remarks that the Chamber may desire to make thereon, and, if possible, to give effect to them from the beginning of the next financial year.

In reply, I am directed by the Committee to return their thanks to the Lieutenant-Governor for the statement and his readiness to consider any suggestions they may have to make, and to say that they would feel further obliged if His Honor would kindly furnish them with similar statements for the three years prior to 1881-82, as well as for the year subsequent, and also advice how the credit balance of each year has been dealt with.

From Government of Bengal to Chamber.

No. 2343,—*Calcutta the* 14*th November* 1883.

I am directed to acknowledge the receipt of your letter of the 8th November 1883, requesting that the Chamber of Commerce may be furnished with statements showing the recepits and charges on aceount of pilotage for the years 1878-79, 1879-80, 1880-81 and 1882-83, and be also informed how the credit balance of each year has been dealt with.

In reply, I am to say that the labor involved in recasting these accounts even for the single year for which they have been supplied to the Chamber was so great, that the Lieutenant-Governor regrets his inability under the extreme pressure of work, existing and prospective, to comply with the Chamber's request.

From Chamber to Government of Bengal.

Calcutta, 20th November 1883.

I have the honor to acknowledge your letter No. 2343, General Department (Marine), dated 14th instant, advising that the labor involved in recasting the statement shewing the receipts and charges on account pilotage for the single year for which you have kindly furnished them, *viz.*, 1881-82, has been so great, that the Lieutenant-Governor reports his inability to comply with the Chamber's request to be furnished with similar statements for the three years previous, together with the year subsequent.

In reply, I am directed to say that the Chamber has no wish to put the Government to the trouble of recasting accounts for past years, but would esteem it a favor if the Government would state what the approximate balances of those years were, and how they have been applied.

From Government of Bengal to Chamber.

No. 2630,—*Calcutta the* 28*th December* 1883.

With reference to your letter, dated the 20th ultimo, requesting that the Chamber of Commerce may be furnished with approximate figures of the balances of receipts on ac-

count of pilotage for the years 1878-79, 1879-80, 1880-81 and 1882-83, after payment of the charges, and enquiring how those balances have been applied, I am directed to forward a copy of the letter from the Accountant-General, Bengal, No. 894C, dated the 8th instant, to the address of the Port Officer, Calcutta, and to say that the Lieutenant-Governor regrets that the information desired by the Chamber could not be supplied without an expenditure of time and labor which it is impossible to incur on account of extreme pressure of work.

From the Accountant-General, Bengal, to the Port Officer.

No. $\frac{C}{894}$, *Dated Calcutta the 8th December* 1883.

With reference to your endorsement No. 4342, dated 29th November 1883, I have the honor to state that there is no separate head for recording charges on account of pilotage in the Books of this office, but the whole transactions are recorded under several minor heads under the major head of Marine, as will be seen from the annual statements of marine receipts and expenditure forwarded to you from this office. It will not be possible, therefore, for this office to separate the items relating to pilotage only, as required by the Government of Bengal. Moreover, the Account office has obviously no means of knowing what items should be taken to represent pilotage charges.

The information required by the Government of Bengal may probably be collected in your office from the annual statements above referred to, which are exact copies of the accounts recorded under the head of "Marine." You have

therefore all the information regarding pilotage receipts and charges afforded by the public accounts on record in your own office.

From Chamber to Government of Bengal.

Calcutta, 10th January 1884.

The Committee of the Chamber of Commerce direct me to acknowledge the receipt of your letter No. 2630 of the 28th of last month, forwarding copy of a communication from the Accountant-General to the Port Officer, No. C-894 of 8th December 1883, relative to the preparation of pilotage accounts in his office, and to express their regret that the detailed statements of receipts and expenditure for the years applied for by the Chamber cannot be supplied.

In the absence, however, of such details, the Committee will be content to learn what was the surplus or approximate credit balance at the end of each of those years, and how it has been disposed of, and they request His Honor the Lieutenant-Governor will be pleased to direct that the Chamber may be furnished with information on those points, as well as to the appropriation of the surplus shown by the revised statement for 1881-82.

The Committee have already in their letter of 28th November 1882 represented the grounds upon which it is expedient that these accounts should be prepared and published, and how the surplus of each year has been dealt with : and it is their duty to again urge upon the consideration of Government the necessity for relieving

the tonnage of the Port as much as possible from the heavy charges which it has to bear.

That those charges are excessive and capable of material reduction is abundantly evidenced by the large surplus which the account for 1881-82 shows, and the Committee have reason to believe that the pilotage accounts for a series of years would also exhibit considerable balances.

THE BASSES AND MINICOY LIGHT DUES.

In July last the Chamber received from Government copy of a despatch from Her Majesty's Secretary of State for India, notifying that Light Dues would be levied in future in respect of the Basses Lights at the rate of 15 pies per ton instead of 12 pies per ton as heretofore, and in respect of the Minicoy Light at the rate of 5 pies per ton instead of $2\frac{1}{2}$ pies per ton as formerly decided. The Committee having already protested against this additional and, as it appeared to them, unnecessary tax upon shipping, in a letter dated 16th November 1882, have reiterated their protest, but apparently without avail, as the notification referred to has since been confirmed.

The argument adduced by the Board of Trade as regards the Basses Lights in support of

the enchanced rate, is that the Board had to purchase a new Tender during the year 1881-82 at a cost of over £14,000 sterling, that the premium demanded for insuring such tender was so excessive as to be considered prohibitory, and that the loss of a tender might happen oftener than could be prevented. Using the very figures adduced by the Board of Trade to prove the contrary, the Committee consider that they have conclusively shown that as regards the Basses Lights there is no need for any such enhancement; that the balance in hand on these accounts, after paying for the new Tender at the end of the financial year 1882-83, could not be less than £9,040-4-3, and with the increasing flow of trade to the East might be much more, and would be amply sufficient to maintain the efficiency of the Light Houses and also provide for insurance of the Tender, which, even at the high premium demanded, they submitted was a more reasonable course to pursue than to saddle present shipping interests with additional burdens for the advantage of posterity.

As regards the Minicoy Light dues the Committee's contention is that these should not be increased by a hundred per cent., *viz.*, from 2½ to 5 pies per ton until it should appear that the actually ascertained expenditure demanded such

increase; in other words, the Committee objected to the doubling of the imposition except for a better reason than that stated, *viz.*, that it was feared the estimates of the cost of construction might be exceeded. The reply the Chamber received to their remonstrance was the exceedingly unsatisfactory and altogether irrelevant one, that the expenditure could not be ascertained until the construction of the Light House was complete.

From Government of Bengal to Chamber.

No. 1525—*Calcutta the* 12*th July* 1883.

I am directed to forward for the information of the Chamber the accompanying copy of a communication from the Government of India in the Department of Finance and Commerce, No. 1034, dated the 22nd May 1883, giving cover to a despatch from Her Majesty's Secretary of State for India, fixing the dues to be levied in future for the Basses and Minicoy Lights.

From Chamber to the Government of Bengal.

Calcutta, 31*st August* 1883.

I am directed by the Committee of the Bengal Chamber of Commerce to acknowledge your letter No. 1525 of the 12th ultimo, with accompanying copies of correspondence anent the Basses and Minicoy Light dues.

It is noted that the Right Hon'ble the Earl of Kimberley, Her Majesty's Secretary of State for India, in his despatch No. 60, dated 19th April last, which the Government of India has forwarded to the several local Governments for attention, states that he has come to the conclusion that there is no reason for resisting the wishes of the Board of Trade to levy dues in future for the Basses Light at 15 pies per ton, and for the proposed Minicoy Light at 5 pies per ton ; and an order, dated 22nd May 1883, has, in consequence, since been forwarded by the Right Hon'ble Her Majesty's Secretary of State, fixing the dues at the above figures.

The Committee of the Chamber regret that their letter, dated 16th November last, has had so little influence ; they, however, feel that they must strongly, though respectfully, still protest against the imposition of an additional tax on shipping, which there is clearly no necessity for.

From the accounts furnished by the Board of Trade, it appears that as regards the *Basses Light dues* the

Revenue from these for the year 1881-82 was	£	13,660	13 4
(and this, too, after deducting £ 2,194-9-7 the full amount refunded to the Peninsular & Oriental Company) while the whole *ordinary expenditure* inclusive of audit fee was	„	3,568	8 10
Thus leaving a sum of	£	10,092	4 6

from which to meet Interest on loan ... £ 3,594 15 0 and portion of principal 2,400 0 0			
	5,994	15	0
or leaving, after paying these, a *surplus* of .	£ 4,097	9	6
or if the refund to the Peninsular and Oriental Company be not deducted, a *surplus* of ...	„ 6,291	19	1

and this already large surplus, the present Government Resolution would result in still further swelling.

After taking out the figures for 1882-83 from Calcutta, Bombay, and Rangoon, it appears that			
Calcutta contributed Rs.	79,708	1	1
Bombay	10,980	9	0
Rangoon	15,244	5	0
or together Rs.	1,05,932	15	1

being on the basis of a collection of 12 pies per ton. At 15 pies per ton, and at an exchange of 1*s.* 8*d.* per rupee, the additional collections during 1882-83 would have amounted to ... ... £ 2,206 18 4

which, added to the surplus of 1881-1882	„ 4,097	9	6
would give a yearly total of ...	„ 6,304	7	10
or adding the Peninsular and Oriental Company's refund, a total of	„ 8,498	17	5

And these figures take no account of the rapidly developing trade between this country and England, which, since the close of 1881-82, has largely increased. It is absolutely certain also that the expansion of trade will continue and grow.

The argument adduced by the Board of Trade in support of the enhanced rates is that the Board had to purchase a new Tender during 1881-82, at a cost of over £14,000, which reduced the surplus fund existing at the end of 1881-1882 to ... £ 4,942 14 9

If, however, as shown before, the surplus for the year 1881-1882 ammounts to £ 4097-9-6 (and this after providing for interest on loan and part payment of principal in addition to ordinary expenditure), it may be assumed that the surplus for 1882-1883 has not been less than „ 4,097 9 6

so that the *surplus* in hand at the end of 1882-83 may be estimated at ... £ 9,040 4 3

There is every prospect, also, of the yearly surplus increasing with the expansion of trade, so that it is plain that the imposition of the further charge, which the Committee protest against, is unnecessary.

If it be argued that 12 pies is no longer the equivalent of 1½*d.*, why then should not the sterling rate be reduced, since, as shown above, the account can well stand the reduction. The Committee think they have now made it abundantly evident, that the additional income

which an additional 3 pies per ton collected in India would yield, is not required.

If, in the exercise of an extreme caution, the Board of Trade think it necessary or expedient to insure the Tender, or property, it would, the Committee submit, be more reasonable to insure it, even at the high premium demanded, than to saddle the shipping now with extra dues for the advantage of posterity.

Then, as regards the *Minicoy Light :* the representation made by the Committee, in their letter of the 16th November last, was to the effect that these dues should not be increased by 100 per cent., that is to say, from 2½ pies to 5 pies per ton, until it should appear that the actually ascertained expenditure demanded such increased tax ; that is, the Committee objected to the doubling of the imposition, except for a better reason than that it was feared the estimate of the cost of construction might be exceeded. The Board of Trade's only reply to this most reasonable representation, is the exceedingly unsatisfactory and altogether irrelevant one, that "the expenditure in the case of Minicoy Light-house can not be ascertained until the erection is complete." Indeed, after most careful perusal of the whole papers, it seems to the Committee that the important questions raised in their letter of the 16th November last, have not really been seriously considered by the Board of Trade as a body ; and the Committee would therefore ask the Government of Bengal to strongly represent their case, so that the imposition of the extra dues may be held in abeyance, pending a full and proper reconsideration of the whole matter.

In conclusion, I am directed to observe that, though in the account furnished by the Board of Trade for the year 1881-82, the large sum of £2,194-9-7 is entered as having been refunded to the Peninsular and Oriental Company, no explanation whatever is given of the circumstances under which such refund was made. I am accordingly, therefore, desired by the Committee to request that the fullest information may be afforded them on this point, particularly as to whether the indulgence, if it be an indulgence, has been granted to the Company for the year 1882-83; and for what further period it is likely to be continued.

From Government of Bengal to Chamber.

No. 1053-*T-G.*,—*Darjeeling the* 29*th September* 1883.

I am directed to state for the information of the Chamber that your letter, dated the 31st August 1883, in regard to the dues to be levied in future for the Basses and Minicoy Lights, has been submitted to the Government of India for such action as may be deemed advisable by that Government.

No. 3611, dated Simla the 9th October 1883.

RESOLUTION—By the Government of India, Department of Finance and Commerce.

READ again—

The order in Council (published in the *Gazette of India* under Notification No. 2286, dated the 27th July 1883) directing that Basses Light dues should, from and after the 22nd of May 1883, be levied in India at the rate of 15 pies per ton instead of 12 pies per ton.

Read—

A communication from the Government of Bombay, No 434, dated the 22nd September 1883, informing the Commissioner of Customs, Salt, Opium, and Abkari that vessels which proceeded on voyages on or after the 22nd May 1883, in the course of which they benefited by the Basses Lights, and for which they paid at the rate of 12 pies per ton should pay the difference between 12 and 15 pies per ton, and approving of the suggestion made by the Collector of Customs and Opium that the levy of such difference of dues should be made at the ports of departure of vessels, the authorities at such ports being held responsible for the recovery.

RESOLUTION.—The arrangement suggested by the Collector of Customs and Opium appears to the Government of of India to be a convenient one, and His Excellency the Governor-General in Council desires that the Governments of Madras and Bengal and the Chief Commissioner of British Burmah may be asked to act upon it, unless they have made any other arrangement for the levy of the difference between the former and present rates. The local officers collecting the dues might be authorised to communicate with each other on the subject in order to prevent the repetition of claims on vessels.

ORDER.—Ordered that a copy of this Resolution be forwarded to the Governments of Madras and Bengal and to the Chief Commissioner of British Burmah or information and guidance.

Ordered also that a copy be forwarded to the Government of Bombay, for information.

No. 2270.

COPY forwarded to the Secretary to the Bengal Chamber of Commerce, for the information of the Chamber, in continuation of my endorsement No. 1071T-G., dated the 1st ultimo.

By order of the Lieutenant-Governor of Bengal,

C. W. BOLTON,

Under-Secretary to the Govt. of Bengal.

CALCUTTA;
GENERAL DEPT.,—*Marine*,
The 7th November 1883.

From J. E O'CONOR, ESQ., *Assistant Secretary to the Government of India, Department of Finance and Commerce, to the Chief Secretary to the Government of Madras. No.* 3256, *dated Simla the* 13*th September* 1883.

The Government of India has received the following telegram from the Secretary of State for India :—

"Minicoy Light dues charged at Madras although Light not yet exhibited. Stop this at once, and, if necessary, at other ports."

I have accordingly this day sent you the following message :—

"Why are you levying Minicoy Light dues? Stop levy at once. See final paragraph of Order in Council, *Gazette of India*, 28th July. Dues levied should be refunded."

2. The Order in Council was published in the *Gazette of India* of the 28th July, under the Notification of

this Department No. 2286 of the 27th July, of which copy was sent separately to the Government of Madras and to all other Governments. As this order is the authority under which the light dues are to be levied, and its final paragraph runs thus—

"And that from and after the date of the first exhibition of light from the said Minicoy Light-house, the dues specified in the schedule marked B, hereunto annexed, shall be levied in respect thereof"—it is not understood how dues have been levied while the light-house is still under construction, and I am to request that an explanation on this subject may be conveyed to the Government of India, together with a statement of the dues levied, whether at Madras or other places in the Presidency, and the measures taken to refund them.

COPY forwarded to the other Local Governments for information and guidance.

No. 1071T—G.

COPY forwarded to the Secretary to the Bengal Chamber of Commerce, for the information of the Chamber, with reference to the correspondence ending with my letter No. 1053T—G., dated 29th September 1883.

By order of the Lieutenant-Governor of Bengal,

C. W. BOLTON,

Under-Secretary to the Government of Bengal.

DARJEELING,
GENERAL DEPT.—*Marine*,
The 1st *October* 1883.

TONNAGE SCHEDULE AND RULES FOR THE MEASUREMENT OF BALED CARGO.

THE urgent necessity for introducing a system of authorised measurement of baled cargo—Jute, Jute Cuttings, Rejections, and such like—was pressed by the Committee on the attention of Members in a Circular dated the 19th February 1883, (A) which will be found below, together with other papers bearing on the subject; and a general consensus of opinion being in favor of the course suggested, a Committee selected from the mercantile community was invited to undertake the duty of taking into consideration the whole question of measurement of cargo for shipment from this port, and the introduction of a comprehensive system of measurers.

Upon the receipt of that Committee's Report (B), dated the 18th of June, a meeting was held on the 3rd of the following month, the proceedings of which will be found in copy marked (C).

At that meeting it was resolved that the Rules then adopted should be incorporated into the Chamber's Tonnage Schedule, but as under the Chamber's Rules no change could be made without 3 months' previous notice, a special meeting was convened for the 4th of October, when the

amended Schedule with the new rules was unanimously adopted.

In the meantime the Executive Committee of the measurement scheme took preliminary steps for introducing the proposed system, and so soon as they were free to recognise the rules as part of the Tonnage Schedule of the Port, arrangements were actively entered into for giving the scheme a fair trial. To the success of the movement, thus far, ample testimony has been borne by the considerable support it has already received, 485,000 bales having been registered as passed by the measurers to the 31st December 1883; and the Committee entertain no fears that the expectations of all interested will be disappointed.

A

BENGAL CHAMBER OF COMMERCE,

Calcutta, 19th February 1883.

DEAR SIRS,

Numerous complaints exist against the present system of measuring baled cargo for shipment in Calcutta, and several representations have been made to the Committee of the necessity for some action being taken to put an end to a state of things which is said to be so unsatisfactory. The nature of the present arrangements for

measuring cargo, and the frequency of the disputes which occur between the shipper and the loading vessel are well known; the Committee are aware, however, that a good deal of difference of opinion exists as to the method of a remedy, and that the difficulty of finding a remedy is the principal reason why none is attempted.

At the same time it seems now almost imperative that something be done to alleviate a condition of things which has been long felt to be a blot on the Port. The Committee accordingly submit the following scheme for your consideration for a comprehensive system of licensed measurers, with a view to eliciting the real state of public feeling on the question, and the nature of the plan, if any, likely to be generally acceptable.

1.—In the first place, it is assumed that measurement on boardship or "alongside" is not practicable. In theory it is probably the fairest arrangement, but it would be otherwise in practice.

2.—The present system of measurement of jute at the press-house by the captain or his representative is open to abuse, in the fact that what is the true measurement at the press-house may not be equally so alongside or on board the loading vessel, and the difficulty on the part of the captain of knowing that cargo sent alongside is the same cargo that he measured on shore.

3.—The scheme now submitted by the Committee assumes the foregoing to be generally acknowledged, and proposes to solve the difficulties which arise therefrom by removing the duty of taking the measurement equally from the shipper and from the captain, and by placing it

in the hands of licensed measurers who shall be independent of both.

4.—The first necessity involved by this scheme is a head measurer, or superintendent, who shall be in control of the department; and to secure a reliable man, a good salary must be given, of not less than, say, Rs. 600 per month.

It will be necessary also to entertain a measuring staff on about the following scale :—

1	Assistant Superintendent on	...	Rs. 400	per month
1	„ „	...	„ 300	„
14	Measurers „	...	... „ 150	„
3	„ „	...	... „ 100	„
20	Out-door Sircars to record measurement and carry callipers, books, &c.	...	„ 10	„
1	Clerk at Custom House ...	...	„ 50	„
	Office establishment, rent, &c., say		„ 5,000	„

5.—There are some 20 Jute presses in Calcutta. To each of these presses one or more measurers, according as the volume of the business demands, should be attached. Their business should be to measure for each boat as loaded and record results on forms provided by the measurer's office. Four copies of the record to be made; one to go with the boat to be delivered to the ship; one to be delivered to the shipper; one to be given to the press-house manager, and one for the measurer's office file. Not less than five bales out of each boat load to be measured, and as many more as circumstances may demand.

The press-house measurers to be changed at short intervals to minimize the opportunities for collusion.

On arrival of the boat alongside the ship, and before any of its contents have been received on board, it shall be optional with the master or officer in charge to accept the press-house measurement as given on the record received per boat or to call for a new measurement alongside. Notice of such requirement to be sent to the Head Office at once, when the head measurer, or one of his assistants, shall immediately proceed to the ship and there take a new measurement, which shall be final. A fixed arbitrary expansion of 2 cubic feet shall be allowed for each ton of 5 bales of jute as the expansion natural between the press-house wharf and the ship's side.

7.—But to prevent unnecessary and frivolous complaints on the part of the masters of ships, a fee of Rs. 32 for each re-measurement alongside, to be paid in advance by the vessel demanding the re-measurement, shall be imposed. This fee to be refunded in the event of the claim for re-measurement being established by the result.

8.—All goods, except jute, shipped over the Custom House wharf or through the jetties, to be measured by the head measurer or his assistant, which measurement shall be final.

9.—All goods, such as gunny bales, shipped from mills outside the limits of the port, to be measured alongside by the head measurer or one of his senior assistants, and actual measurement to be taken which shall be final.

10.—All goods shut out and transferred from alongside one vessel to another, shall be taken on the original press-house wharf measurement, subject to the captain's option of re-measurement as per clause 6.

11.—That the present method of taking the measurement of a particular bale, namely, that the "measurement shall be taken at the largest part of the bale inside the lashings on one side, and outside the lashings on the other," be done away with, and that the following method be adopted:—"The length of the bale to be obtained as usual, the package being on its side. The width and depth to be ascertained by placing the bale on one end and putting the callipers over the other, outside the lashings on both sides." As in rough packages, such as jute, the edges of the bale are ragged, the measurement must not be taken less than 4 inches from the edges of the bale. In the case of heavy goods, like hides, the above rule to be modified as may be necessary, and hereafter decided.

This point, however, may be subject to alteration.

12.—The total expense of the measuring department may be estimated at about Rs. 60,000 per annum.

13.—The total export of goods subject to measurement at time of shipment during the year 1882, was about 2½ million packages, comprising jute-cuttings, etc., gunny bales for America, Australia, Egypt and Europe, cotton to Europe, hides to America, jute and sundries.

14.—An average charge of not over ¼ anna per package on every package shipped would more than cover the cost of the department, and it is proposed that the charge be defrayed by the ship: the amount to be collected by means of a clerk kept at the Custom House when the pass is being got out.

Your opinion on the above proposal is requested.

B

To the Secretary, Bengal Chamber of Commerce.

Calcutta, 18th June 1883.

The Representative Committee nominated by the Committee of the Chamber from the mercantile community of Calcutta, to consider the whole question of measurement of cargo for shipment from Calcutta, and the introduction into the port of a comprehensive system of sworn measurers, have now the honor to report as follows :—

1. That they have met on three different dates, *viz.*, on the 28th of May, 4th and 11th June, a full attendance of members being present on each occasion.

2. That the proposition formulated by the Committee of the Chamber, also the proposition to same purpose formulated by Messrs. Turner, Morrison & Co., with the remarks thereon, have been laid before the Committee and have had their careful consideration.

3. That the representations on the same subject received by the Calcutta Chamber from the London, Liverpool and Glasgow Shipowners' Associations and the Dundee Chamber of Commerce have also been laid upon the table and duly considered.

4. That the following resolutions were, after full discussion, agreed to :—

1.—That a remedy is urgently required to put an end to the present unsatisfactory system of measurement of baled cargo shipped from the port of Calcutta.

2.—That the remedy for jute be obtained by means of the introduction of a system of sworn measurers, to be placed under the direction of the Chamber of Commerce or Port Commissioners.

3.—That measurement alongside or on boardship of jute, though perhaps the fairest arrangement, is unadvisable.

4.—That measurement be taken at place of shipment, *i. e.*, exporting wharf, jetty, or press-house where adjacent to place of shipment, at measuring Superintendent's discretion, but only whilst the bales are actually being removed in course of shipment.

5.—That such measurement be final.

6.—That in cases of shut-out cargo, or cargo transferred from one vessel to another, original measurements to hold good.

7.—But that any cargo re-landed be re-measured.

8.—That the present method of taking measurement be allowed to stand, *viz.*, that measurement be taken at the largest part of the bale, inside the lashing on the one side, and outside on the other.

9.—That the present custom in regard to jute shipped without measurement be allowed to stand, *viz.*, that the measurement of such jute be entirely at shipper's risk, and that measurement be a matter of special arrangement between the shippers and ship. Further that all expenses

connected with the measurement thereof be payable by the shippers.

10.—That all cotton and other baled cargo arriving at the East Indian Railway Company's terminus at Howrah for shipment direct by boat, be measured by the sworn measurers in the Railway Company's sheds, while being removed in actual course of shipment.

11.—That all baled cargo pressed at, or exported from, any of the press-houses to which a sworn measurer may be attached, be treated in the same manner as jute, and as provided for in the 4th resolution.

12.—That gunny bales packed at, or exported from, mills within the limits of the port, be also measured as described in the 4th resolution.

13.—But that gunny bales or other cargo pressed at, or exported from, mills or presses outside of the limits of the port, be measured by the sworn measurers alongside.

14.—That all baled, cased, or other cargo not provided for in any of the foregoing resolutions, and which at present is measured on this side under any of the tonnage schedules now in use in the port, or which may require to be measured on this side by a special arrangement made between shippers and ship, that all such cargo be measured on the Custom House wharf (if for export by boat) or in the jetty sheds (if for shipment through the jetties) by the sworn measurers.

15.—That for the present the sworn measurers to be appointed to carry out this scheme be placed under the direction of a Representative Committee to be nominated by the Committee of the Chamber of Commerce.

16.—That the charge for measurement be defrayed by the ship.

5. That all the foregoing resolutions, except Nos. 15 and 16, were agreed to unanimously.

6. That the 15th resolution was carried by a majority as against a proposal that the sworn measurers be under the Port Commissioners and not the Chamber of Commerce.

7. That the 16th resolution was carried by a majority as against a proposal that the charge for measurement be paid half by the ship and half by the shippers.

8. That upon the Chairman explaining that several members of the Chamber and of the Representative Committee had originally made the appointment of Europeans for the sworn measurers a *sine qud non* in connection with any measurement scheme, a discussion followed and the principle was agreed to as far as might be found practicable; but the Committee, without passing a formal resolution to that effect, considered it a matter of detail which might be left to the special representative Committee to be appointed to carry out this scheme.

9. That a sub-Committee consisting of Messrs. Anderson, Syrioti, Bleeck and Stevenson were then appointed to draw up this report—and thereafter agreed,

10. That it be an instruction to this sub-Committee to point out to the Committee of the Chamber the importance of obtaining the sanction of the general mercantile community to this scheme with as little delay as possible, so that it may take effect not later than, say, 15th August next.

We remain,
Sir,
Your obedient servants,
(Signed) A. M. SYRIOTI,
„ WM. BLEECK,
„ JAMES STEVENSON,
„ THOS. STEEL ANDERSON,
On behalf of Representative Committee.

Representative Committee.

WM. BLEECK	of	MESSRS. ERNSTHAUSEN & OESTERLEY.
J. CRUDEN	„	GLADSTONE, WYLLIE & Co.
ROBT. WILLIAMSON	„	FINLAY, MUIR & Co.
A. B. SHEKLETON	„	SHEKLETON & Co.
C. E. SMYTHE	„	TURNER, MORRISON & Co.
A. MORGAN	„	LANDALE & MORGAN.
A. F. C. FORBES	„	F. W. HEILGERS & Co.
C. D. STEWART	„	GEORGE HENDERSON & Co.
A. M. SYRIOTI E. J. KING	„	RALLI BROTHERS.
H. B. HARRISON	„	RUTHERFOORD & Co.
T. S. ANDERSON	„	ANDERSON, WRIGHT & Co.
H. REINHOLD	„	REINHOLD & Co.
J. STEVENSON	„	GRAHAM & Co.

C

At a meeting of the mercantile community held this day, Tuesday the 3rd of July 1883, *at the office of the Bengal Chamber of Commerce, the following gentlemen were present :—*

J. J. J. KESWICK	of	MESSRS. JARDINE, SRINNER & Co.
A. F. C. FORBES	„	F. W. HEILGERS & Co.
J. CRUDEN	„	GLADSTONE, WYLLIE & Co.
ROBT. WILLIAMSON C. S. HOARE	„	FINLAY, MUIR & Co.
J. HORNE	„	SHAW, FINLAYSON & Co.
W. BLEECK	„	ERNSTHAUSEN & OESTERLEY.
A. M. SYRIOTI E. J. KING	„	RALLI BROTHERS.
H. REINHOLD	„	REINHOLD & Co.
E. L. HAMILTON	„	HOARE, MILLER & Co.
W. P. ALEXANDER	„	MACKINNON, MACKENZIE & Co.
F. WHITNEY	„	WHITNEY BROTHERS & Co.
J. HENDERSON	„	GEORGE HENDERSON & Co.
T. S. ANDERSON	„	ANDERSON, WRIGHT & Co.
J. STEVENSON	„	GRAHAM & Co.
H. B. H. TURNER C. E. SMYTH	„	TURNER, MORRISON & Co.
A. MORGAN	„	LANDALE & MORGAN
THOS. HENDERSON	„	DUNCAN BROTHERS & Co.
R. HADENFELDT	„	OLDEMYER & HADENFELDT.
H. W. ULOTH	„	SUPERINTENDENT, P. & O. Co.

BABOO SULLUGRAM KHUNNAH.

Mr. Keswick, President of the Chamber, having taken the Chair, said that the meeting had been convened for the purpose of adopting the Report lately submitted by a

Representative Committee on the question of measurement of jute and other baled cargo, and the introduction into the port of Calcutta of a comprehensive system of sworn measurers.

Copies of that Report having been furnished to all the gentlemen present, it was not necessary for him to do more than to invite an expression of opinion on the main question therein referred to, and any matter connected therewith that might be brought forward.

But before proceeding further with the Report the Chairman informed the meeting, that, subsequent to the receipt of the letters from the London, Liverpool, and Glasgow Shipowners' Associations, and the Dundee Chamber of Commerce referred to in the Report, the Chamber had received further communications from the Dundee Chamber and Liverpool Shipowners' Association and from the Chamber and Shipowners' Association of Greenock, and in all those representations "measurement alongside" was urged upon the attention of the Chamber. The Liverpool Shipowners' Association had sent a copy of a letter addressed to them by one of their members, Mr. J. R. DeWolf, which the Chairman said he thought it as well to read, as it was stated to express the views of a very large proportion of British shipowners.

Liverpool, 30th May 1883.

TO THE SECRETARY, SHIPOWNERS' ASSOCIATION,

Liverpool.

I recently received a circular letter from the Secretary of the Bengal Chamber of Commerce on the subject of

proposed changes in the mode of measuring Jute at Calcutta, and I shall be obliged if you will kindly submit the following remarks on this very important subjec to the next meeting of your Association, who, I am glad to learn, are giving earnest consideration to this question.

1. It is gratifying to shipowners that the ship agents and merchants at Calcutta are at length awakening to the eminently unsatisfactory nature of the system of measuring jute which has so long prevailed at Calcutta to the serious detriment, loss, and inconvenience to merchants as well as to shipowners, ship-masters and agents, and which has benefited no one except, perhaps, press owners and measuring clerks.

2. Had the shipping Bunders at Calcutta been as few as those at Bombay, nothing better could be done than simply to adopt the Bombay system which has given so much satisfaction to both shippers and shipowners.

3. As, however, there are so many shipping Bunders or Ghauts at Calcutta, and most of them at so great a distance from the city, it would be a very heavy and a perfectly needless expense to station measurers at each of those ghauts. In the first place, they would be idling most of their time, and secondly, they would be too far away for efficient supervision. In fact any new arrangement on this basis would be little, if any, improvement on the present system. In my opinion the only system of measuring which can be satisfactory at Calcutta is one based on a plan of measuring alongside the ships.

4. It is admitted by the Committee of the Bengal Chamber of Commerce, in their letter herein referred to,

that this would be the fairest arrangement in theory, but that it would be otherwise in practice, and they assume that it is not practicable, but they assign no reason for arriving at this conclusion.

5. As a matter of fact, measuring alongside is frequently practised when it suits the merchants to require it, and it is gladly acceded to by the ship agents and captains, and is never found to be impracticable, and I have the authority of one of the largest and most experienced shipping firms in Calcutta for saying that there would be no difficulty in carrying out a well-regulated system of measuring alongside the ships. In support of this view I beg to call attention to paragraphs 6 and 9 of the Committee's letter, arrangements are specially suggested for measuring alongside in particular cases, which would be superfluous if "impracticable." And as regards the fairness of the theory of measuring alongside "being otherwise in practice," I cannot deal with this point, as no reason is given by the Committee for their assertion, and I do not know what is meant by it. I may observe, however, that fair and just measurement is all that shipowners advocate and desire, and I cannot understand how any interest can suffer thereby.

6. I beg to point out that by establishing a well-regulated system of measuring alongside, the business might be carried out by comparatively few hands, and a higher rate of remuneration afforded to a reduced staff and a superior and more efficient staff of measurers thus secured.

The Head Office for the staff of measurers might be established in some central position with stations situated

conveniently for the shipping, say two men at the jetties, two at Prinsep's Ghaut, and two lower down the river, and a signal adopted by which they could be informed that their services are required at any particular ship or ships, say by hoisting a flag to be agreed on as the signal for measurers wanted. In time these men would become expert in averaging the bales either in lighters or on the ships' decks, and with such duly appointed and responsible measurers, there would be no room left for disputes, and the probability of bribery and corruption almost, if not entirely, removed by the presence of the parties representing the different interests.

7. I would suggest that in order to secure a fair average of measurement at least 25 bales in each 100 should be measured promiscuously as they are being discharged from the boats, and I am strongly of opinion that 50 cubic feet shall be adopted and established as the standard ton measurement to be used for freight calculations, &c. The measurement, of course, to be made alongside or on deck of the ships.

8. Referring to the 14 and last paragraph of the Committee's circular, it is therein proposed that the entire cost of establishing and maintaining the measurers shall be levied on the ships in the shape of an average charge of half-an-anna per package shipped, but as the shippers and merchants will be benefitted by the arrangement as well as the shipowners, I would suggest that one-half of the charge shall be borne by the cargoes.

In conclusion, I hope that I will be pardoned for respectfully urging on your Association the necessity for

prompt and persistent action in furtherance of this most desirable reform of a long existing abuse at the port of Calcutta. I make bold to say that I am expressing, however feebly, the unanimous feeling of the shipowners of Liverpool, in stating my conviction that no system but that of measuring alongside the ships, and establishing the standard of 50 cubic feet per ton for freight measuremement, can be satisfactory to British shipowners; and I am further of opinion that there will always be irritation, obstruction, and dissatisfaction and injustice inflicted on the shipowners while the present or any similar system of measuring between the presses and the ships is allowed to exist.

I beg to remain,
Dear Sir,
Yours faithfully,
JAMES R. DEWOLF.

The Chairman then called upon the Meeting to express their views on the subject before them.

A general discussion of the various points embraced in the Report having taken place—

Mr. Turner proposed, and

Mr. Stevenson seconded the adoption of the Report.

Mr. Alexander was of opinion that the adoption of the Report should have reference to Jute only, and proposed an amendment to that effect, which was seconded by

Mr. Thos. Henderson.

Mr. Reinhold proposed, and

Mr. Syrioti seconded, that the Report be considered paragraph by paragraph.

Both these amendments were put to the vote and lost.

Mr. Alexander then proposed "that all Gunnies be excluded from the arrangements embodied in the Report," but the proposal was not seconded.

Mr. Cruden proposed, and

Mr. J. Henderson seconded "that all Gunnies, whether rope or iron bound, be measured alongside or on board," but the motion was lost.

Mr. King proposed as an amendment, which

Mr. Reinhold seconded, "that Gunnies from Mills outside of the port only be measured alongside or on board," but the proposal was withdrawn in favour of the Resolution proposed by

Mr. T. S. Anderson, seconded by

Mr. J. Henderson "that gunny bales or other cargo exported by boat direct from outside the limits of the port be measured by the sworn measurers on the deck of the ship or alongside, but that it shall be optional with outside mills and press-houses to make arrangements with the Managing Committee, on such terms as may be mutually agreed on, for the attendance of sworn measurers at their

ordinary shipping wharves for measurement in accordance with Rule 4."

The Resolution was carried.

Mr. T. S. Anderson also proposed, and

Mr. J. Henderson seconded, that the Resolution now carried take the place of Resolution 13 of the Report, and that the Report with that amendment be adopted; and the motion was carried.

Mr. J Henderson then proposed, and

Mr. T. S. Anderson seconded, the following:—

"That the Resolution as passed by this Meeting be sent up to the Chamber of Commerce, and that the Chamber be asked to call a Special Meeting to adopt it as one of its rules in terms of its rules.

A vote of thanks to the Chair terminated the proceedings of the Meeting.

EMPLOYMENT OF ANGLO-INDIANS AND EURASIANS IN THE PILOT SERVICE.

THE following correspondence contains earnest representations from the Eurasian and Anglo-Indian Association of Calcutta relative to the employment in the Bengal Pilot Service of young men born and educated in this country, and copies of the discouraging replies hitherto given to them,

which practically exclude Eurasians and Anglo-Indians from a service in which several members of those classes of the community, in previous years, distinguished themselves for professional skill and personal character, and satisfactorily discharged their duties as Bengal pilots.

The matter having been referred to the Chamber for an expression of opinion, and the Committee having ascertained the views of members regarding it, the reply which closes this head of the Report was submitted to the Government of Bengal, communicating the opinion that the Association had made out a very strong case in favor of the employment of the classes they represented, and that there appeared no good reason why Government should rule against their admission into the Pilot Service so long as sobriety, attention to duty, necessary training, knowledge of seamanship and sufficient physique qualified them for that service.

From the Government of Bengal to Chamber.

No. 569, *the* 13*th March* 1883.

Letter from the Assistant Secretary to the Government of India, in the Department of Finance and Commerce, No. 195, dated the 28th February 1883, with enclosures.

With reference to the enclosed copy of a correspondence, I am directed to request that you will be good enough to favour the Lieutenant-Governor with an expression of

the opinion of the Chamber on the subject of the employment of Anglo-Indians and Eurasians in the Bengal Pilot service.

From J. E. O'CONOR, ESQ., *Assistant Secretary to the Government of India, Department of Finance and Commerce, to the Secretary to the Government of Bengal, General Department,—No.* 1095, *dated Calcutta, the* 28*th Feburary* 1883.

I am directed to forward herewith copy of a memorial from the Eurasian and Anglo-Indian Association, Calcutta, appealing against the decision of the Government of India that the Bengal Pilot Service shall be recruited only from the training ships in England, and praying that arrangements may be made by Government for giving Anglo-Indians and Eurasians a professional training in this country so that they may be eligible for the service.

2. The Governor-General in Council, as at present advised, does not consider that there are sufficient grounds for modifying the system to which the Association takes exception, but His Excellency in Council would wish, before communicating the memorial to the Secretary of State, to be favoured with an expression of the views of His Honor the Lieutenant-Governor on the whole question, which, as far as can be gathered from the papers, has not been before

* From the Secretary to the Eurasian and Anglo-Indian Association, No. 144, dated 21st May 1879.
To the Secretary to the Eurasian and Anglo-Indian Association, No. 922S, dated 31st July 1879.
To the Secretary to the Eurasian and Anglo-Indian Association, No. 150, dated 8th April 1882.
From the Secretary to the Eurasian and Anglo-Indian Association, No. 50, dated 9th May 1882.
To the Secretary to the Eurasian and Anglo-Indian Association, No. 1246, dated 22nd May 1882.

the Government of Bengal recently. A copy of the correspondence * subsequent to the letter from the Government of Bengal, No. 178, dated 10th February 1879 to the Association, is forwarded for information.

3. I am to add that the Government of India would be glad to receive an expression of the views of the Bengal Chamber of Commerce on this question.

To the RIGHT HON'BLE THE EARL OF KIMBERLEY,

Secretary of State for India.

The memorial of the Board of Direction of the Eurasian and Anglo-Indian Association.

RESPECTFULLY SHEWETH,

That your memorialists are the representatives of an Association composed of domiciled Englishmen, Englishmen temporarily residing in India, and persons of mixed descent belonging to the country, whose object is to promote the moral and social welfare of the permanent Christian community of India, and to obtain for them a fair share with natives of the country of the advantages of British rule.

2. That this Christian community owes its existence to the presence of Europeans in India and has a special claim on the sympathies of the British Government. Although this claim would never be urged by your memorialists to the prejudice of any other class of Her Majesty's subjects in India, they humbly conceive that it might be becomingly advanced in respectful deprecation of injurious

measures operating with special and apparently unnecessary rigor against the members of this community.

3. That for fifty years before the year 1870 young men born and educated in India were admitted into the Bengal Pilot Service, and rendered good service in it to the State. The annexed list of such persons, with the dates of their appointments, will show that, in what may be called the worst years of the service, that is to say, the years in which, on account of the imperfect charts and defective steam agency then available, the calling was a more dangerous one than at any later period, no question of their fitness for such work had ever been raised. Although absolute accuracy is not to be expected in the minuter details of such a subject, your memorialists have good reason to believe that most, if not all, of the persons named in this list received no special training for their work beyond the ordinary English education then obtainable in the country. Nevertheless the persons to whose names an asterisk is attached rose to the position of Branch Pilot, and those to whose names a double asterisk is attached rose to the rank of Senior Branch Pilot.

4. That under the circumstances your memorialists were surprised and pained to read in the report of a speech made by the Lieutenant-Governor of Bengal at a public school in Calcutta in 1878—a statement to the effect that the Bengal Government had been compelled to bring out young men from training ships in England, because young men in Calcutta could not be persuaded to enter the Pilot Service. Your memorialists in January 1879 submitted a representation to the Bengal Government pointing out the incorrectness of the statement attributed to the Head of

the Local Government, and asking for some official announcement of the qualifications considered necessary in candidates for appointments in the Pilot Service, and assuring the Government that young men born and educated in India were as ready as they had always been to enter the Pilot Service. The only result of this appeal was an answer from the Government of Bengal stating that the Government intended to supply its pilots from England.

5. That your memorialists subsequently, in May 1879, approached the Government of India and pleaded against the hardship of the orders passed by the Government of Bengal, respectfully urging that, in consequence of the course pursued by the Government of Bengal, a wrong had been done to the domiciled Christian community of India in excluding its members from a sphere of useful employment to which they had access for half a century, and subjecting them to a fresh and unprovoked civil disability, while for them the Bengal Pilot Service had been made more exclusive than any service in India, not excepting the Civil and Military Services.

6 That the Government of India, while treating your memorialists with great courtesy, still firmly declined to accede to their prayer, and assigned the following reasons for their refusal :—

"At present Eurasian and Anglo-Indian youths can only qualify themselves for the Pilot Service by going through a course of professional training in England, which it is doubtless difficult for them to do. Although His Excellency in Council is very reluctant to close any career to the Eurasian and Anglo-Indian community in

this country, it must at the same time be borne in mind that the position of a pilot is one of very great responsiblity, and it is perhaps nowhere more responsible than in Bengal, for it is well known that the navigation of the river Hoogly is very difficult, while the pilots there are entrusted with the charge of life and very valuable property under critical and often dangerous conditions, requiring the possession of qualities which can be attained only by special training.

"In this country, moreover, there are no means at hand for giving a proper professional training, and having regard to the considerations mentioned in the preceding paragraph, the Government is bound to select the best men it can get for the Bengal Pilot Service, and His Excellency in Council has therefore somewhat reluctantly come to the conclusion that that service should continue to be recruited from England only."

7. That your memorialists have therefore no option but of appealing to your Lordship in Council.

8. That your memorialists humbly, but earnestly, submit that, notwithstanding their "professional training" in England, young men brought out to his country must undergo special training in India to acquire a knowledge of the intricacies of the river Hoogly, which the Government admits is a dangerous river, and consequently, before they can be entrusted with the duties of a pilot, they must, as Indian youths used to be in earlier years, be employed for a considerable time as leadsmen. That the efficiency of the service rendered by pilots born and bred in India has never been called into question, and many of them have borne the highest reputation for pro-

fessional skill and personal character; that the condition of the river Hoogly, so far from having grown worse, has during recent years been much improved in consequence of the adoption of landmarks and buoys, and the introduction of steam ships; and the value of these improvements has still further been enhanced by accurate charts based on more complete surveys. Thus the duties of pilots have, if they have changed in any respect, become rather less than more onerous and responsible than before.

9. That the policy of the Indian Government has in late years been to give the fullest employment in all branches of the State service to natives of the country who may disclose fitness for any particular kind of work; that the former plan of practically compelling natives to go to England before they could find employment in India has been virtually set aside by special nominations to even privileged appointments; and that it would prove a great hardship to domiciled Englishmen and persons of mixed descent, if treated as though they were *Englishmen* whenever prizes are specially offered for native competition, and regarded as *natives* when selections are made from Englishmen, they should be shut out from a service to which as Anglo-Indians they have always had access, and in which they have behaved well.

10. That even if it were satisfactorily proved that proper training is not obtainable in India, it would be more in accordance with the honourable traditions and generous practice of the Government to provide the necessary training than to punish men who, in spite of

all obstacles, have contrived to acquire the necessary qualifications for the service and to do their duty.

11. Your memorialists accordingly in conclusion earnestly pray that young men born and educated in India may be admittted to the Pilot Service as heretofore, but that if such young men are to be excluded from the Pilot Service on the ground of want of proper training in seamanship, arrangements may be made by Government for providing the youth of this country with suitable training ships as is done for the youth of England.

And your memorialists as in duty bound shall ever pray, &c., &c.

HENRY FINTER.	C. E. DISSENT.
J. H. BELCHAMBERS.	L. W. D'CRUZ.
H. ANDREWS.	JOHN T. SCOBELL.
H. E. HARFORD, S. J.	W. T. THURLOW.
JOHN O. N. JAMES.	W. H. KIRPATRICK.
THOMAS A. MENDERS.	H. C. CHICK.
THOMAS A. MUNRO.	L. C. FLEURY.
C. FREDERICK.	W. HENRY BRAY.
C. S. HARINGTON.	C. A. ANDREWS, M. A.
E. W. BABONAU.	(Cantab)
RIVERS HOWE.	

The 1st February 1883.

ENCLOSURE TO MEMORIAL.

Names marked thus * became Branch Pilots and those * * Senior Branch Pilots.

Edmond Bartlett, 1820.* *
J. Bartlett, 1823.*
T. Bartlett, 1824.
J. Keymer, 1827.*
T. Scallan, 1830.*
T. L. Hart, 1832.*
J. M. Hamilton, 1832.*
W. Bails, 1835.
F. E. Bond, „
W. N. Cearns „
W. G. Baxter „
T. Cleghorn, 1836.
J. Richardson,
C. D. Strover, 1837.
C. H. Perie, „
C. W. Warden, 1837 *
E. W. Kearney, „
G. B. Smart, 1838. * *
E. D. Strover, 1839.
G. Spence, „
T. Warden, „
W. W. Laws, „
H. K. Eckley, 1840.
D. Richardson, „
C. J. McDormond, 1841.
W. H. Fielder, 1841.—*Born in Australia.*
R. W. Laws, „
E. Arrowsmith, 1842.
J. R. Lacken, 1843.*
C. Cearns, „
T. A. Boyce, 1843.
W. H. Cox, „*
E. G. Cox, 1843.
A. Bond, „
J. Fielder, 1844.—*Born in Australia.*
D. Dyson,
G. A. M. Cox, 1844.
J. H. Baldwin, 1846.
C. L. Clarke, 1847.
W. P. Black, 1848.
N. W. Vaughn, „
R. Wall, „
A. J. Millner, 1852.*
E. A. Wall, „
W. O. B. West, 1853.
H. T. Black, „
J. R. Wells, 1854.*
H. T. Philips, „*—*Born in Madras.*
A. Fielder, „—*Born in Australia.*
E. C. Coury, 1855.
J. Lambrick, „
J. Dyer, 1855 „*
J. Hall, 1856.
D. J. Scott, „—*Born in Australia.*
J. A. D. Miller, 1857.
T. W. Higgens, „
J. Baxter, „
Edwin Bartlett, 1858.
J. T. Broadhead „
R. G. Ball, 1859.
F. A. Hand, 1860.
S. Bartlett, 1861.
R. G. Hand, „
W. A. Sealy, „

MARINE DEPARTMENT PROCEEDINGS, SEPTEMBER 1879.

Question of the employment of Eurasians and Anglo-Indians in the Bengal Pilot Service.

No. 2447.

From W. C. MADGE, Esq., *Secretary to the Eurasian and Anglo-Indian Association, to the Secretary to the Government of India Home Department—(No.* 144, *dated Calcutta the* 21*st May* 1879.)

I am directed by the Board of this Association humbly to submit, for the consideration of His Excellency the Viceroy and Governor-General of India in Council, the following representation on the recent exclusion of Anglo-Indian and Eurasian lads, who have been educated in this country, from the Bengal Pilot Service.

2. For more than twenty-five years it has been the practice of the Government of Bengal to admit young men to the Pilot Service from the public schools of Calcutta; and if enquiry were made into the matter, it would be found that men of this class have done good service to the public, have won the esteem of their fellows, and have been highly spoken of by former Heads of the Marine Department. The names of Messrs. Bartlett, Cleghorn, Cearns, Cox, Smart, Spencer, and Keymer may be mentioned as those of Eurasians, most of whom have been educated in the country, and all of whom have taken the highest rank in the Pilot Service for personal character, physical energy, and professional skill.

3. Evidence is on record in abundance that when an Indian Marine was in existence, and ships belonging to

the Government cruised in Indian waters, Eurasians flocked to them in large numbers, and rendered service to the State as officers and engineers.

4. Under circumstances of which the Board are not fully aware, the Bengal Government has of late years shut out this class of men from the Pilot Service; and as this exclusion amounts to the creation of a new and grave civil disability, the Board humbly conceive, with due deference to the Bengal Government, that they have reasonable grounds for an appeal from its decision to the Government of India on behalf of the community whom they represent.

5. The Board earnestly solicit attention to the following facts taken from a correspondence with the Bengal Government, a copy of which is forwarded herewith.

In an address delivered to the pupils of St. Xavier's College in December last, His Honor the Lieutenant-Governor of Bengal declared that the Bengal Government had at one time been willing to admit into the Pilot Service young men who had been educated in Calcutta, but had afterwards been compelled to bring young men out from training ships in England, because young men in Calcutta were unwilling to enter the Service. The Board hereupon addressed His Honor the Lieutenant-Governor, and, after representing certain facts, ventured to solicit from the Bengal Government a statement of the qualifications considered necessary in pilots. The Bengal Government replied that the training of Eurasians and their general physique and temperament seemed hitherto to have served to disqualify them for certain pursuits,

inferentially the Pilot Service amongst others, and the Eurasian youths did not, as a rule, take to a seafaring life, and that it would be useless to post boys fresh from school to the service. In the reply submitted by the Board, it was pointed out that for twenty-five years young men had been occasionally admitted direct from Calcutta schools as leadsmen in the Pilot Service, and had found such training as they had received on the pilot brigs sufficient for the purposes of their calling; that other young men of the same stamp were willing to follow their example, but were unable to obtain nominations such as those had secured; that other young men still of the same classes, who had actually been trained to a seafaring life, were also unable to secure nominations for the Pilot Service which they were desirous of entering; and finally, that a larger number of young men of the same class did not take to a seafaring life, because the law in section 5, Indian Apprentice Act XIX of 1850, prevented their doing so. In answer to these representations, the Board were referred to the former letter of the Bengal Government, and informed that Government intended to supply its Pilot Service from training ships at home.

6. The double result of this action is that, while on the one hand, a class of men who have hitherto been admitted into a branch of the public service are now debarred from it, on the other, the Bengal Pilot Service has been made more exclusive than any other service in India.

7. The Board submit this representation in the earnest hope that a consultation with the Government of Bengal

may result in the removal by that Government of the disability which it has created, and in the publication of a statement of the qualifications considered necessary in young men desiring to enter the Pilot Service.

8. But if, for reasons unknown to the Board and notwithstanding the facts mentioned above, it is considered indispensable that young men educated in Calcutta should receive some other description of the training in seamanship than that already received by those members who, having been trained as seamen, are unable to obtain admission into the service, or that greater facilities for following a seafaring career should be given to Anglo-Indian and Eurasian young men in general, the Board respectfully solicit that the Government pilot brigs be used for training young men, and that apprentices be also received on other Government ships.

From COLONEL H. K. BURNE, C. B., *Secretary to the Government of India, Marine Department, to the Secretary to the Eurasian and Anglo-Indian Association,—(No. 922S, Memorials, dated Simla the 31st July* 1879.)

I am directed to acknowledge the receipt of your letter No. 144 of the 21st May 1879, on the subject of the exclusion of Anglo-Indians and Eurasians from the Bengal Pilot Service.

2. With reference thereto, I am desired to inform you that this question of the employment of Eurasians and Anglo-Indians in the Pilot Service will be taken into consideration in connection with the general question of the education and employment of Eurasians and Anglo-

Indians which is now occupying the attention of the Government of India.

From R. E. HAMILTON, ESQ., *Officiating Assistant Secretary to the Government of India, Department of Finance and Commerce, to the Secretary to the Eurasian and Anglo-Indian Association, Calcutta,—No. 150, dated the 8th April* 1882.

In continuation of the letters from the Government of India marginally noted, I am directed to state, for the information of the Eurasian and Anglo-Indian Association, that the question of employing Eurasians and Anglo-Indians in the Government Pilot Service has been fully considered by His Excellency the Governor-General in Council.

Home Department, No. 1227, dated 25th August 1881.
Marine Department, No. 9228, dated 31st July 1879.

2. At present Eurasian and Anglo-Indian youths can only qualify themselves for the Pilot Service by going through a course of professional training in England, which it is doubtless difficult for them to do. Although His Excellency in Council is very reluctant to close any career to the Eurasian or Anglo-Indian community in this country, it must at the same time be borne in mind that the position of a pilot is one of very great responsibility, and it is perhaps nowhere more responsible than in Bengal; for it is well known that the navigation of the river Hooghly is very difficult while the pilots there are entrusted with the charge of life and very valuable property under critical, and often dangerous, conditions requiring the possession of qualities which can be attained only by special training.

3. In this country, moreover, there are no means at hand for giving a proper professional training; and, having regard to the considerations mentioned in the preceding paragraph, the Government is bound to select the best men it can get for the Bengal Pilot Service, and His Excellency in Council has therefore somewhat reluctantly come to the conclusion that that service should continue to be recruited from England only.

From W. C. MADGE, ESQ., *Secretary to the Eurasian and Anglo-Indian Association, Calcutta, to the Officiating Assistant Secretary to the Government of India, Department of Finance and Commerce.—No.* 50, *dated 9th May* 1882.

I am directed by the Board of this Association to acknowledge the receipt of your letter No. 150, dated 8th April, and in reply to submit the following representation for the consideration of the Government of India.

2. The Board feel that it would not become them in any way to attempt to interfere with the Government in the choice of public servants for any department of the Administration from any classes which experience had shown to be best capable of supplying what was needed by the State. And if the Government had stated that persons born and educated in this country had never been admitted into the Bengal Pilot Service or that such persons had been admitted into that service but had uniformly failed in it, and that success in such a career was impossible to such persons, the Board would have felt bound to defer to the decision of the Government.

3. But I am directed respectfully to point out that the facts seem all the other way, as the records of the Marine Department themselves show. Young men born and educated in India had, for more than 25 years, previously to 1875, been admitted to the Bengal Pilot Service, and avowedly rendered efficient service in it. In the Board's letter No. 144 of May 1879, the names of a few such men, *viz.*, Messrs. Bartlett, Cleghorn, Cearns, Cox, Smart, Spencer, and Keymer, were mentioned as those of men of East Indian families who had been educated and trained in this country, and all of whom had taken the highest rank in the Pilot Service for personal character, physical energy, and professional skill. If mis-statements had been pointed out in these representations, the Board would feel how weak their contention had proved. But so long as these statements are acknowledged to be correct, the Board respectfully submit that their point is not turned by any declaration, however true, to the effect that duties of a pilot are onerous and responsible, and the navigation of the Hooghly perilous—conditions which have all along existed.

4. The Board are aware that facilities for the prosecution of a seafaring life, as indeed for most other callings, are sadly wanting to the Christian youths of this country, but they would earnestly plead that where, in spite of grave drawbacks, the Christian youths of the country have apparently held their own in the unequal contest with foreign competitors, the fact should call for a generous recognition rather than for the creation of a new civil disability.

5. I am directed to point out, with the utmost deference, that the Board would shrink from entering into

anything like a theoretical discussion with the Government on any matter of speculative interest, but have been emboldened to appeal to facts on the present occasion, because opportunities of obtaining employment are becoming increasingly scarce, and any new deprivation, such as that now created, does not merely tend to lower the social status of the community against whom it operates, but is also attended with grave and distressing social consequences.

6. I am to add that the whole community would feel deeply grateful for any facilities for the prosecution of a seafaring career which the Government might feel disposed to provide, in keeping with its general policy of dealing generously with those who have served it well.

From R. E. HAMILTON, ESQ., *Officiating Assistant Secretary to the Government of India, Department of Finance and Commerce, to the Secretary to the Eurasian and Anglo-Indian Association, Calcutta,—No.* 1246, *dated the* 22*nd May* 1882.

I am directed to state, for the information of the Eurasian and Anglo-Indian Association, that your letter No. 50, dated the 9th instant, relative to the question of employing East Indians in the Bengal Pilot Service does not bring forward any new grounds which would lead the Government of India to alter the decision already communicated to you in my letter No. 150, dated the 8th ultimo, and which was arrived at, with some reluctance, after a very careful consideration of the matter.

From Chamber to Government of Bengal.

Calcutta, 30th May 1883.

I am directed by the Committee of the Chamber to acknowledge receipt of your letter No. 569, dated 13th March, on the subject of the employment of Anglo-Indians and Eurasians in the Bengal Pilot Service.

The Committee observe that the subject has been taken up by Government in consequence of an appeal from the Anglo-Indian and Eurasian Association against the exclusion from the Pilot Service of a class of the community represented by that Association.

Without having had placed before them for consideration the grounds upon which Government deemed it advisable to adopt the disability complained of, the Committee of the Chamber are of opinion that the Association has made out a very strong case.

Sobriety and close attention to the River Surveyor's reports seem to be the chief qualifications for success in the Pilot Service, so long as the necessary training, seamanship, and physique are not wanting: there does not appear, therefore, to be any good reason why Government should rule against the admission of Anglo-Indian and Eurasian lads; promotion being made dependent upon satisfactory proof of fitness for the service.

The Committee of the Chamber believe the necessary professional training could be obtained by means of the existing pilot brigs, or they would approve if Government could see its way to establish and maintain a training ship in Indian waters.

But if Government should consider that an English training is, for any reason, indispensable, the object in view might be obtained by the throwing open for competition, in Indian schools, scholarships tenable by Anglo-Indian and Eurasian youths in training ships in England.

A recent Resolution of the Government of India (No. 1541-57-G., dated 29th November 1882,) providing for the training of a Native engineer in England at the public cost, avowedly with the design of making experiments in the same direction, may perhaps be considered to have furnished the necessary precedent.

LENIENCY OF SENTENCES PASSED ON CREWS OF BRITISH VESSELS CHARGED WITH SERIOUS OFFENCES.

It will be in the recollection of members that a few months ago a meeting of masters of vessels then lying in this Port was held, with the view of pressing upon the attention of the Chamber the extreme leniency of the sentences passed by the Presidency Magistrate on the crews of some vessels who were charged with very serious offences, that desertion, refusal of duty, and other offences against the Merchant Shipping Law had become very prevalent, and that they were due, in a great measure, to the inadequate sentences passed on the offenders.

The Committee considered the matter of sufficient importance to be dealt with in a representation to the Government of Bengal, and the following correspondence ensued. The Lieutenant-Governor was glad that the matter had been brought to his notice, and His Honor hoped that the evils complained of would be lessened, if not altogether removed, by the publicity whch the subjects referred to had received.

From Chamber to the Government of Bengal.

Calcutta, 31*st July* 1883.

I am directed by the Committee of the Chamber of Commerce to bring to the notice of His Honor the Lieutenant-Governor the leniency of the sentences that have been lately passed by the Officiating Chief Presidency Magistrate on the crews of some of the vessels that have been placed before him charged with most serious offences.

The subject has been pressed upon the attention of the Chamber by a Committee representing the shipmasters of the British and Foreign shipping now lying in the port of Calcutta.

That representative Committee pointed out to the Committee of the Chamber that desertion, refusal of duty, and other serious offences against the Merchant Shipping laws, on the part of seamen belonging to vessels visiting this port, have recently become very prevalent, and they be-

lieve that such a state of affairs is, in a great measure, due to the trivial and inadequate sentences that have been meted out to offenders : they are strongly of opinion that in awarding sentences the Officiating Chief Magistrate has failed to realize or appreciate the importance of the cases before him, and the necessity for the maintenance of discipline on board ship.

The Committee of the Chamber believe it will be sufficient, by way of proof, if they invite His Honor the Lieutenant-Governor's attention to some of the cases which have been reported in the newspapers during the last two weeks ; notably the cases in connection with the ships " Prince Louis," " Allahabad," and " George Gordon," whose crews refused duty at Diamond Harbour on the way out to sea without any good reason, and caused losses to the owners which must have amounted to not less than Rs. 2,500 to Rs. 3,000 per ship.

The Committee would ask His Honor's particular attention to the case of the " Scottish Chieftain," and beg that special inquiry be made into her case, so that a new trial may be granted if advisable, or such notice taken as will satisfy the mercantile marine community of the port that reasonable care will be taken and sufficient punishment inflicted to deter evil-disposed persons from the commission of similar offences in future.

It appears that the crew of this vessel, a night or two after her arrival in port, armed themselves with knives and other dangerous weapons, went aft, and, in the most violent and brutal language, threatened the lives of the captain, his wife, and officers, who were obliged to fly for safety.

The offenders were apprehended by the Police and taken before the Magistrate, with the result as reported by the *Indin Daily News*, viz. :—

The charge against a Ship's crew.—"The case in which "twelve seamen were yesterday charged with being mutin- "ous on board the *Scottish Chieftain*, was this day re- "sumed.

"Mr. Hume, who appeared for the prosecution, inform- "ed His Worship that the Captain's wife, who had intend- "ed to offer evidence to-day, could not attend Court on "account of her having been suddenly taken ill; he would, "therefore, call upon the Steward. The Steward, who was "next briefly examined, deposed that he was lying down "in his bunk on Sunday night last, when he was disturbed "by a noise. On his coming out he saw the crew running "in all directions. He identified Shaw and Beck, and "also recognised Melbourne's and Jansen's voices. One "of them said that he would cut the heart out of any one "aft, and he afterwards saw Shaw and the carpenter in a "struggle, in which the former was thrashing the latter. "The case for the prosecution here closed, and the Court "proceeded to frame charges against the defendants. The "first and second defendants were charged with assaulting "the carpenter, and criminally intimidating the Captain. "The third, fourth, fifth and sixth with criminally intimi- "dating the Captain, and the last six defendants were "discharged for want of evidence. All the defendants, "except the first who did not seem to recollect anything, "pleaded not guilty, and called upon their co-defendants "to prove their case. The Court, however, disbelieving "the case for the defence, sentenced the first and second

"defendants to two months' rigorous imprisonment, and "the third, fourth, fifth and sixth to one month's rigorous "imprisonment."

The Committee of the Chamber agree in thinking that the crew of the "Scottish Chieftain" could only have acted in a worse manner if they had actually perpetrated violence, and the sentences awarded in the Police Court were not calculated to uphold discipline, but to lower it generally among seamen.

It has been represented to the Committee of the Chamber that the appointment of a Marine Magistrate, one having some experience of the sea, shipmasters, and seamen, to try all cases in connection with the shipping, as in many other ports, would have the best possible effect in Calcutta, and the Committee would ask His Honor the Lieutenant-Governor's consideration of the suggestion.

The Committee would also respectfully represent that the present practice of the shipping office in not allowing masters to engage seamen in lieu of those detained in hospital till the last moment before sailing is fruitful of much inconvenience and expense to shipping interests, and often leads to detention of vessels from the seamen engaged in this manner not reporting themselves, or, after reporting themselves, going ashore again on account of some imaginary grievance. The Committee of the Chamber believe that this difficulty might be overcome by the Shipping Master being instructed to allow shipmasters to replace men in hospital, say, three clear days before sailing.

The Committee are pleased to observe from the newspapers that the police have during the last few days been

overhauling some of the so-called seamen's boarding houses in the neighbourhood of Lall Bazaar, for they believe that the harm done by some of these establishments, which cause much friction between masters and men, is incalculable. They require to be put under a much more strict system of Police supervision than at present obtains.

From Government of Bengal to Chamber.

No. 4J—LT., dated Dinagepore the 1st November 1883.

I am directed to acknowledge the receipt of your letter, dated the 31st July last, in which the Committee of the Chamber of Commerce bring to the notice of Government the leniency of the sentences that have been lately passed by the Officiating Chief Presidency Magistrate of Calcutta on the crews of certain vessels that have been placed before him on various charges. The Committee draw particular attention to the case of the *Scottish Chieftain*, and ask that special enquiry may be made into it in view to a new trial being granted, if advisable, or such notice taken of it as will satisfy the mercantile marine community of the port that reasonable care will be taken, and sufficient punishment inflicted to deter evil-disposed persons from committing similar offences in future. The Committee suggest the appointment of a Marine Magistrate for the trial of cases in connection with the shipping; they complain of the inconvenience and expense caused to shipping interests by the practice which at present exists in the Shipping Office of not allowing masters of vessels to engage seamen in place of those detained in hospital till the last moment before

sailing, and conclude by remarking that the so-called seamen's boarding-houses in the neighbourhood of Lall Bazar require to be put under a much more strict system of police supervision than at present obtains.

2. In reply, I am to forward, for the information of the Committee of the Chamber, the accompanying copy of a letter No. 274, dated the 23rd October, from the Officiating Chief Presidency Magistrate of Calcutta, and in doing so to point out that the cases of the refusal of duty by the crews of the *Allahabad* and *George Gordon* at Diamond Harbour, to which reference is made in paragraph 4 of your letter, appear never to have been brought before Mr. Henderson for trial at all. As regards the *Prince Louis*, I am to say that the action of the Magistrate in passing a nominal sentence on the crew of that vessel was due entirely to the application made by the ship's agents, asking that the men might be put on board.

3. I am further to draw attention to the fact that on two occasions, *viz.*, on the 13th and 17th May, no less than seventeen of the crew of the *Allahabad* were prosecuted for refusal to do duty. Their defence was that they were badly treated, and that all they wanted was to get away from the ship. The Lieutenant-Governor is of course not in a position to say whether the plea of ill usage was a valid one or not, but from circumstances which have been brought to his knowledge in connection with shipping cases, he is inclined to believe that the crews of vessels in the port of Calcutta are not unfrequently treated with severity, harshness, and even unfairness, more particularly at times when seamen are plentiful, the object being to get rid of men who have not given satisfaction, and who,

owing to the treatment they have received, are willing to go without being paid the full amount due to them as wages rather than remain in the ship.

4. As regards the case of the *Scottish Chieftain*, I am to say that the Lieutenant-Governor is not inclined to accept altogether the view taken by the Magistrate. The case probably originated, as Mr. Henderson thinks it did, from some of the crew having come on board in a state of intoxication, and commenced a disturbance which gradually grew into very violent and mutinous behaviour. A severe example should, therefore, in Mr. Rivers Thompson's opinion, have been made of the ringleaders. At the same time the Lieutenant-Governor is constrained to remark that, having regard to the statements recorded by the Magistrate, who had all the evidence before him, it was in some measure due to the conduct of the Captain and his officers that the disturbance assumed the serious proportions which it did, and that if they had acted with some show of firmness, the disturbance would probably have been quelled without difficulty. Indeed, it appears that as soon as the Captains of the *Baun* and *Traveller* went on board the *Scottish Chieftain*, quiet was restored. The facts, however, on record show no excuse for the outrageous behaviour of the men, and, as has been above remarked, the Lieutenant-Governor is decidedly of opinion that the sentence passed by the Magistrate was inadequate.

5. With regard to paragraph 8 of your letter, I am to say that the Lieutenant-Governor is not inclined to favour the proposal for the appointment of a Marine Magistrate to try cases in connection with the shipping. No doubt

in shipping cases some experience of nautical matters and of the relative position of commanders of vessels and of seamen generally would be of use; but, in the first place, there would be difficulty in selecting a person for the post competent to investigate the cases before him with that complete impartiality essential to the proper administration of justice; and, secondly, as stated by Mr. Henderson, there would not be sufficient work for a Magistrate dealing exclusively with marine cases.

6. As regards paragraph 9 of your letter, in which the Committee of the Chamber complain of the present practice of the Shipping Office in not allowing masters of vessels to engage seamen in lieu of those detained in hospital till the last moment before sailing, I am to say that the matter will be dealt with in a separate communication, on receipt of a reply from the Board of Revenue, who have been asked for an expression of their opinion upon it.

7. With reference to the remarks made in the concluding paragraph of your letter, I am to forward the accompanying copy of a letter from the Deputy Commissioner of Police, Calcutta, No. 4754, dated the 18th October, reporting the action taken by the police in June and July last, in connection with some of the so-called seamen's boarding-houses in the neighbourhood of Lall Bazar. The Chamber will observe that the matter is engaging the attention of the police.

8. In conclusion, I am desired to thank the Chamber for bringing the different subjects referred to in your letter under the notice of Government, as the publicity which

by means of your letter, and the various notices which have from time to time appeared in the public prints, these matters have received, will, it is hoped, do good in lessening, if not in altogether removing, the evils complained of.

From GILBERT S. HENDERSON, ESQ., *Officiating Chief Presidency Magistrate, Calcutta, to the Secretary to the Government of Bengal, Judicial Department.—No.* 274, *dated Calcutta the* 23*rd October* 1883.

I have the honour to acknowledge receipt of your memorandum No. 2788J—D, forwarding a copy of a letter, dated 30th July 1883, addressed to the Secretary to the Government of Bengal, General Department, by the Secretary of the Bengal Chamber of Commerce, and requesting a full explanation of certain cases referred to in that letter.

Before proceeding to deal with these cases in detail, I would take the opportunity of offering a few remarks upon the letter of the Secretary of the Bengal Chamber of Commerce. It is quite true, as pointed out, that some time previous to the date on which he wrote, that shipping cases, especially cases of refusal of duty, had become very prevalent in the port, and it may be that such prevalence was in some measure due to the leniency of the sentences passed upon the offenders. I have, however, taken the trouble to examine the records of the Court, and I find that the sentences which I have throughout passed are considerably severer than those passed by my predecessor. This seems to suggest that the increase of

shipping cases was not entirely due to the leniency of the sentences of the Court, but must have been owing in some decree to other causes, for, so far as I can discover, no objection had previously been made to such sentences on the ground of their leniency.

It appears that about the time when I took over charge from Mr. Marsden, the port was unusually full, and a very large number of vessels were unchartered, many of which had been lying in port for a long period, and sailors were unusually plentiful. Now my experience has been, and it has been, I find on enquiry, the experience of others, that when the port is full and sailors plentiful and Captains know that they will have no difficulty in filling up the complement of their crews whenever they may require to take their departure, the number of cases connected with the shipping invariably increases. It is impossible to say exactly to what this circumstance is due. This, however, is clear, that as soon as the port begins to empty, and there is consequently a greater demand for seamen, very many fewer cases are brought before the Court, and the punishment of imprisonment in such cases as are brought practically becomes merely nominal, as applications are almost always made to have the offenders taken out of jail and put on board.

As soon as I found that the shipping cases were becoming more prevalent, I at once increased the standard of punishment in order to check the increase of such cases. This I did, it is only fair to myself to state, some time before I was aware, that the matter had in any way attracted the attention of masters and others interested in the shipping.

In June last, notably in the case of some three or four ships, seamen from whose crews were before me repeatedly, the seamen begged that they might be sent to jail for long periods, or periods extending beyond the date of their ships' departure. Their only object in rendering themselves liable under the law, they said, was to get their discharge and get rid of ships in which they found it was impossible for them to do their work peaceably. In such cases I invariably pointed out both to the captains and seamen that I could not allow the sentences of the Court to be used merely as a means of evading the rules of the Port Office, that is to say, by passing sentences of imprisonment which would not expire till after the ships had gone to effect a discharge which the Port Office refused to sanction, or leave it open to the captains to effect such a discharge.

I shall now deal with the cases referred to in the letter of the Secretary of the Bengal Chamber of Commerce in order.

In the case of the *Scottish Chieftain*, 12 seamen were brought before me, Nos. 1—6 being charged by the Police with criminal trespass, and Nos. 1 and 2 further with committing mischief and assaulting the chief officer, second officer and carpenter, and Nos. 7 to 12 with aiding and abetting. After recording the evidence for the prosecution, I found that there was absolutely no evidence against the last six defendants, and I discharged them. I then framed formal charges against Nos. 1 and 2 of assault and criminally intimidating the Captain, and against Nos. 3, 4, 5 and 6 of criminally intimidating the Captain. It is stated in the letter of the Secretary of the Bengal Cham-

ber of Commerce that the crew of the *Scottish Chieftain* "armed themselves with knives and other dangerous weapons, went aft, and in the most violent and brutal language threatened the lives of the Captain, his wife, and officers who were obliged to fly for safety." That statement is not strictly accurate. It seems to imply that the crew having deliberately armed themselves went aft with the intention of threatening the Captain and officers and committing violence, if necessary. That brutal language was used, and that one of the crew was heard to say that he would cut out the heart of every one aft, and threats were heard that they would cut out the liver (or heart) of the old son of a bitch (meaning the Captain), is true; but the evidence does not bear out the statement that the crew armed themselves with knives and dangerous weapons.

There was some evidence that two of them had knives, but it is not an unusual thing for sailors to carry knives.

The evidence was that some of the crew came on board drunk and rushed on the poop, making a great noise. At this time the Captain and his wife were in the cabin. Instead of doing anything to quell the disturbance, the Captain at once betook himself to the after cabin, and there locked himself and his wife in.

The chief officer and second officer also fled, and bolted themselves in. The result was that the ship was practically left in possession of a few drunken sailors, and the natural result followed:—a very great noise was made, so great, that the captains of two other vessels, the *Traveller* and the *Baun*, which were alongside, came on board, and the row was put a stop to, and the police called in.

It appeared to me, then, as it appears now, that anything like an attempt at open mutiny was never thought of. The ship was in port alongside of other vessels, and assistance was readily obtainable. The charges to which I have already referred, and upon which they were brought before me by the Police and the Government Prosecutor, did not suggest that there was anything like mutiny.

Had the Captain and his officers only exercised a little firmness, it appeared to me that the disturbance would never have assumed the serious shape it did.

I treated the affair, as it certainly was at the beginning, as a mere drunken row, which might have been put down at once if the Captain and officers had acted otherwise than they did. Taking that view I considered it sufficient to sentence the two leaders to two months' and the others to one month's rigorous imprisonment.

In the letter of the Secretary of the Bengal Chamber of Commerce, the attention of the Lieutenant-Governor is drawn to the cases of the *Prince Louis*, the *Allahabad*, and the *George Gordon*, whose crews are stated to have refused duty at Diamond Harbour on the way out to sea without any good reason, and caused loss to the owners which must have amounted to not less than Rs. 2,500 or Rs. 3,000 per ship.

This is the first intimation which I have received that the crews of either the *Allahabad* or *George Gordon* had refused duty at Diamond Harbour. I had never so much as heard of the existence of the *George Gordon*.

On the 7th July I granted summons against ten of the crew of the *Prince Louis* for having refused to proceed to sea at Diamond Harbour. All the summonses, however, were not served, the Captain of the vessel and the agents not having given any assistance to the serving officer.

A member of the firm of Messrs. Graham & Co., the Agents of the ship, appeared before me, and on behalf of the Agents stated that he was anxious that the men should be put on board. I thereupon replied that if that were so it would be a mere farce to pass a heavy sentence of imprisonment as I otherwise should have done, and that I would merely pass what I considered to be a nominal punishment under the circumstances, and direct that the Captain, might have the men put on board at once. I accordingly passed a sentence of 14 days' rigorous imprisonment on four out of the five men, who were brought before me. The fifth I discharged as he had not been properly shipped and put on the articles. He had been shipped at Garden Reach at 1 A. M. on the morning on which the vessel dropped down the river, but the Captain had not taken the trouble to observe the formalities required by the law in cases where seamen are thus shipped without reference to the Port authorities.

It may be well to point out the following particulars with reference to the *Prince Louis* and *Allahabad* during their stay in Calcutta.

On the 16th June four of the crew of the *Prince Louis* were charged before Mr. Gupta with desertion. Two of them were ordered to return to their ship, and two sentenced to three weeks' rigorous imprisonment, all forfeiting the costs of their arrest.

On the 23rd one of the crew was charged before me with desertion, and begged me to send him to jail for a period extending over the date of the departure of his ship, so that he might not go in her. I sentenced him to a fortnight's rigorous imprisonment and forfeiture of the costs of his arrest, and the Captain had him put on board when he left.

On the 13th May, 13 of the crew of the *Allahabad* were sent to jail for a week's rigorous imprisonment for refusing duty. They stated that they were badly treated, and wished to get away from the ship.

On the 17th May four of them were again brought before me, charged with refusing duty. They stated that it was impossible for the crew to get on or work together to the satisfaction of any one on board, as there were no three men on board of the same nationality, which appeared to be substantially true, and that all they wanted was to get their discharge. I sent them to jail for one month's rigorous imprisonment.

On the 12th June the Captain of the *Allahabad* charged one of his seamen with absence without leave for four days. The seaman expressed his willingness to return to duty. I directed him to do so, forfeiting the costs of his arrest and his pay during his absence. This was the last I ever heard of the crew of the *Allahabad*, except that on the 1st July a cook charged the first and third officers with assault. I dismissed the case, as I found the cook had himself been greatly to blame.

I am naturally reluctant to criticise the suggestion made by the Bengal Chamber of Commerce that a Marine Magis-

trate, one having experience of the sea, shipmasters and seamen should be appointed to try all shipping cases in Calcutta, as the suggestion was made with reference to cases which have been tried by myself. I can only say that personally I do not consider the suggestion a wise one. A man having the experience which the Chamber of Commerce seems to consider necessary is much more likely to have a strong bias either in favour of seamen or of masters, proprietors, and agents, a thing certainly not to be desired. Moreover such a man is not likely to have had a sufficient legal training, which, though in many cases not altogether necessary, is eminently indispensable to enable one to deal with the difficult questions of law which do not unfrequently arise in shipping cases. Further, the number of shipping cases is not nearly sufficient to occupy the time of a separate officer. Ordinarily the number of such cases does not, I believe, average more than two or three a week, and they are almost invariably short and disposed of in a few minutes.

I am glad to be able to state, for the information of the Lieutenant-Governor, that at present cases of desertion and refusal of duty are greatly on the decrease.

From H. G. WILKINS, ESQ., *Officiating Deputy Commissioner of Police, Calcutta, to the Secretary to the Government of Bengal Judical Department, Darjeeling,—No.* 4754, *dated Calcutta the* 18*th October* 1883.

I have the honor to acknowledge the receipt of your docket No. 2789J.D. of the 4th instant, and in reply to report, for the information of the Hon'ble the Lieutenant-Governor of Bengal, that in June last it was

brought to my notice that a West Indian, named Brown, had a seamen's boarding-house in Champatollah 1st Lane, and that he kept it in a most unsatisfactory and dirty manner. I, in company with the Police Surgeon, visited the house early one morning and found a considerable number of seamen lying all about the place. Some had from their appearance evidently been fighting the previous day or night, and one even was still under the influence of liquor. In fact, the whole place was so dirty, so overcrowded, and so badly kept, that I directed the house to be closed, and this was done.

2. Another seamen's boarding-house in Bow Bazar Street was kept by a man named Hardy. On the 21st July it was found that Hardy had, with the assistance of his runner, enticed a seaman from his ship and secreted him in his boarding-house. The police, after some difficulty, succeeded in tracing the seaman to Howrah, where he had been sent away when Hardy had found out that the police were making enquiries into the matter. The seaman was prosecuted for desertion, and Hardy for breach of the third condition of his license, which is to the effect that he shall not harbour any deserters from vessels. The seaman was sentenced to imprisonment and Hardy to pay a fine of Rs. 100.

3. I found that Hardy had behaved so disgracefully in the case that I at once cancelled his license. Notwithstanding this, Hardy, as I am informed, again commenced through a second person to take in lodgers, who, he declares, are not seamen, but enquiries are now being made into the matter, and a prosecution will again be undertaken if found desirable.

4. On the 20th July a foreigner, named J. Nicholas, was prosecuted for keeping a seamen's boarding-house without a license, and he was fined Rs. 25, and warned to close it at once, which he has done.

5. The closing of these places has, I think, done some good, and the subject will not be lost sight of

---

From Government of Bengal to Chamber.

No. 2537, *Calcutta the* 8*th December* 1883.

In continuation of para 6 of letter No. 4 J.L.T., dated the 1st November 1883, from the Judicial Department of this office, I am directed to forward, for the information of the Chamber, copy of the correspondence * noted on the margin regarding the suggestion made by the Chamber that ship-masters be allowed to replace seamen in hospital three clear days before sailing.

* Letter from the Board of Revenue, L. P., No. 891 B, dated the 26th November 1883 with enclosures.
Letter to the Board of Revenue, L. P., No. 2536, dated 8th December 1883.

From Board of Revenue to Government of Bengal.

No. 891 *B. Dated Calcutta the* 26*th November* 1883.

I am directed by the Board of Revenue to acknowledge the receipt of Government Order No. 1136 $-\frac{T}{G}-$, dated 6th October 1883, forwarding for report an extract from a letter from the Bengal Chamber of Commerce, complaining of the inconvenience caused to the shipping by the present practice of the Calcutta Shipping Office in not allowing masters to engage substitutes for seamen detained

in hospital till the last moment, and suggesting that ship-masters be allowed to replace men in hospital three clear days before sailing.

In reply, I am to state that it has been ascertained from the Shipping Master of Calcutta that the practice alluded to by the Chamber is that under which a ship-master is not allowed to discharge and pay up any of his ship's crew who might be in hospital and to engage substitutes unless he produces a certificate from the hospital authorities that the men he proposes to discharge will be unable to proceed in the vessel, and that this is usually done either on the day of or the day previous to the ship clearing from the Shipping Office. The Shipping Master says that he placed himself in communication with the principal hospitals in Calcutta and Howrah, and that from the replies received from them (copies of which are enclosed) he does not think there will be any difficulty in carrying out the suggestions of the Chamber.

The Shipping Master, I am to add, has not yet received any answer to the reference made by him to the Principal of the Medical College Hospital, but seamen are rarely admitted there.

From Surgeon Superintendent, Presidency General Hospital, to the Deputy Shipping Master— No 506. *Dated Calcutta the* 27*th October* 1883.

In reply to letter No. 805 of 26th instant, informs the Deputy Shipping Master that the certificates can be granted three days before ships sail if application then

be made. Undersigned has never declined to issue such certificates.

The applications should be made before 9 A. M. Great inconvenience arises from applications arriving at all hours when the Medical Officers are absent from the hospital.

From the Civil Surgeon, Howrah, and Secretary of the Howrah General Hospital, to Deputy Shipping Master, Calcutta, $\frac{0}{281}$, Howrah the 27th October 1883.

There would, as a rule, be no difficulty in certifying three days before the sailing of a ship whether a man belonging to it will be fit to go or not. But you will understand that any unexpected sickness occurring in the three days would be outside the calculation.

From Government of Bengal, to Board of Revenue,—No. 2536, *Calcutta the 8th December* 1883.

In acknowledging the receipt of your letter No. 891 B., dated the 26th November 1883, with enclosures, I am directed to request that the Board will be so good as to issue instructions to the Shipping Master of Calcutta to carry out in future the suggestion made by the Chamber of Commerce that ship-masters be allowed to replace seamen in hospital three clear days before sailing.

PILOT BRIGS AT THE SANDHEADS.

In continuation of the correspondence on this subject which appears in the Chamber's last Report, the Committee submit a further representation which was rendered necessary by a renewal of complaints of the great delay which vessels experienced on their arrival at the Sandheads in consequence of the want of pilots at the station.

From Chamber to Government of Bengal.

Calcutta, 12th May 1883.

The detention of vessels at the Sandheads, in consequence of the delay in supplying them with pilots, was the subject of a representation to the Honorable the Lieutenant-Governor about this time last year; and I am desired by the Committee of the Chamber to draw His Honor's attention to a renewal of the serious inconvenience to several vessels from the same cause about a fortnight or three weeks since.

The steamer "Governor" arrived at the Pilot Station at 11 A.M. of the 18th of April, but her Commander was informed from the Brig that no pilots were then available. The steamer waited until 11 P.M. of the 19th, when, after an interval of 36 hours, she secured a pilot, out of several who had been sent down by an outward bound steamer.

When the "Governor" proceeded there were eight steamers and six sailing vessels waiting for pilots. These were, no doubt, supplied as promptly as circumstances would admit; but it has been represented to the Committee that there appears to be a want of foresight in anticipating the requirements at the Pilot Station, especially at a time of the year when strong southerly winds prevail and a large influx of sailing vessels may be looked for, in addition to steamers whose arrival may be approximately ascertained by reference to ordinary shipping reports.

As the serious results to vessels detained for want of pilots have been represented to His Honor in previous correspondence the Committee need not dwell upon them now: His Honor has recognised the importance of the matter, and the Committee are satisfied that this renewed submission of a question which affects the shipping interests of the port will receive prompt consideration.

In conclusion I am desired to inquire if the new Pilot Brig, referred to in Government of Bengal letter No. 187 of 30th June to the Port Commissioners, has arrived and been placed in commission, in order to bring up the establishment to its proper strength.

From Government of Bengal to Chamber.

No. 331 *T. G.—Darjeeling, the* 4*th June* 1883.

With reference to your letter dated the 12th May 1883, regarding the detention of vessels at the Sandheads in April last, in consequence of the paucity of pilots there, I am directed to forward, for the information of the

Chamber, the enclosed copy of a letter from the Officiating Port Officer, Calcutta, No. 2011, dated the 23rd idem, with enclosures.

2. In answer to the enquiry made in the last paragraph of your letter, I am to say that the new pilot brig is not expected before July next. The Lieutenant-Governor, however, some time ago issued orders that the pilot station during the monsoon should be served by two brigs; or by one brig and the steamer *Undaunted* in the absence of one of the brigs. Arrangements have also been made whereby, to save time, pilots are sent by rail to Diamond Harbour, and thence to the pilot station in the steamer *Undaunted*, failing passing vessels.

3. Mr. Rivers Thompson trusts that these arrangements, which seem to be the best that can be made, will meet the requirements of the port.

I have the honour to be,
SIR,
Your most obedient servant,
A. P. MACDONNELL,
Offg. Secretary to he Government of Bengal.

From J. BREBNER, *Esq.*, *Officiating Port Officer of Calcutta, to the Secretary to the Government of Bengal, General Department. No.* 2011, *dated Calcutta, the* 23*rd May* 1883.

I have the honour to acknowledge receipt of your No. 920, of 16th instant, giving cover to a letter* from the Chamber of Commerce, regarding the detention of vessels at the

* Returned herewith.

Sandheads in consequence of the supply of pilots there being unequal to the demand.

1. In reply thereto I would, in the first place, invite attention to the statement accompanying this letter, from which will be seen at a glance the disposition of the members of the Pilot Service on the day specified in the correspondence, viz. the 18th April.

2. From the second statement B, it will be seen that the number of vessels arriving at the Sandheads during the last month was abnormally large, being 77 per cent. in excess of those which arrived in the same month of the previous year.

3. It is argued that southerly winds usually bring up a large number of sailing vessels to the Sandheads, and that this should have been anticipated and provided for by having pilots to meet them. While acknowledging the correctness of such a conclusion, one important point in connection therewith seems not to have been taken into consideration, which is, that although southerly winds are of much benefit to inward-bound vessels, they have an entirely contrary effect on those leaving the port; the consequence being, that with the heavy sea usual at such times, and adverse strong breezes, occasionally amounting to half a gale, towage beyond Saugor becomes well nigh impossible. Many vessels consequently become wind-bound with pilots remaining by them, whose services are thus temporarily lost, and the plans and arrangements made at head-quarters for the regular supply of officers at the Sandheads often become nullified.

4. I contend, although with deference, that in the instances under report, as well as during the whole of the

months of April and May, slight delay to shipping at the Sandheads became well nigh unavoidable, and that no forethought could possibly have prevented it. Owing to the paucity of vessels proceeding downwards during parts of the former month, relays of pilots were despatched to the Sandheads by every available means. The numbers marginally noted were sent in the *Baghdad, Court Hey*, and *Malda*; the *Celerity* was asked for from the Deputy Director of the Indian Marine, the *Tigris* offered but was unfit for seawork; the *Undaunted* unfortunately being in dock undergoing repairs, an endeavour was made, but unsuccessfully, to obtain the services of a river tug, and to engage passages for officers by the Chandbally steamer, and every effort was made by this department to keep up a constant supply of pilots, which proved a failure only in the instances brought to notice.

Baghdad	4
Court Hey	3
Malda	9
Total ...	16

5. When it is taken into consideration that during the latter part of April the vessels arriving at the Sandheads (a large proportion of which were sailing vessels which ordinarily retain their pilots for a much longer time than steamers) were considerably in excess of those proceeding down, Government will, no doubt, appreciate the difficulties this department had to contend against under very exceptional circumstances, and may be pleased to admit that the Service, consisting at the time of only 33 running officers, as per margin, was as well worked as it could be, when delays on the river,

	Ordered to Sandheads.
In town ...	7
Under application and proceeding down ..	17
At Sandheads	
Proceeding up ...	9
Total ...	33

vessels being wind-bound, and the absence of special pilots on duty, are taken into account.

6. It would, I respectfully submit, have been difficult, to have anticipated with any degree of accuracy the arrival of so many vessels during the current and previous months, as several bound to the ports of Burmah, owing to some disturbance in trade there, had, I understand, their destination unexpectedly changed to Calcutta after leaving their ports of departure.

7. Any detention to shipping is very much to be regretted, and I can but assure His Honor that every effort has been, and will continue to be, made by this department to prevent it, although at times, I with deference submit, a reaonable delay during exceptional seasons, and owing to the difficulty of communication with the cruizing ground, can scarcely be avoided.

A.

Disposition of Running Pilots on the 18th April 1883.

Number of officers available in town	7*
Number of officers under orders to proceed down and applied for	17*
Number of officers proceeding up	9
Number of officers running on special lines...	10
Number of officers in command	2
Number of officers in sick quarters	3
Number of officers on casual or short leave	6
Number of officers on long leave...	7
Number of officers under suspension...	1
Total ...	62

* 3 sent per *Court Hey.*
4 „ per *Baghdad.*

B.

Number of arrivals of vessels during April 1882. *and the corresponding month of* 1883.

	April.
1882	... 67
1883	... 118

CALCUTTA, *The 22nd May* 1883. } JAMES BREBNER, *Offg. Port Officer of Calcutta*

From Government of Bengal to Chamber.

No. 1431, *Calcutta, the 3rd July* 1883.

In continuation of Mr. MacDonnell's letter No. 331 T dated the 4th ultimo, I am directed to say that a Committee composed of the officers named on the margin, having reported that the steamer "Undaunted" is unsuited for pilotage duties at the Sandheads, the Lieutenant-Governor has withdrawn the order directing her despatch to that Station. The repairs of the "Cassandra" have now, however, been completed and she proceeded on the morning of the 30th ultimo to take up her place at the Sandheads.

1. Mr. E. H. Fenn, Staff Officer.
2. Mr. J. McArthur, Inspector of Machinery, and
3. Mr. W. McIver, Chief Builder of the Government Dockyard.

INADEQUATE DOCKING ACCOMMODATION FOR THE PORT OF CALCUTTA.

This matter was referred to in the Chamber's last Report, and it has again formed the subject of a representation to the Port Commissioners

in consideration of the complaints of the inconvenience to which the shipping may be put in consequence of the large dock hitherto available to the public having been acquired by the Commissioners: and it will be seen, from the Government Resolution on the subject, that in view of the limited docking accommodation existing in Calcutta, the Lieutenant-Governor approves of the Commissioners' previous intimation to the Chamber that the dock may be available to outside vessels urgently requiring it if it is not occupied by vessels belonging to the Commissioners.

From Chamber to the Port Commissioners.

Calcutta, 11th July 1883.

THE attention of the Chamber has again been called to the inconvenience and loss to which steamers and large vessels may be subjected in consequence of the Calcutta Docking Company's dock having passed into the hands of the Port Commissioners.

You have already favoured the Chamber with a copy of a Resolution of the Commissioners, dated 14th February last, which was to the effect that the Commissioners had acquired the dock to provide accommodation for their own vessels, which they believed were sufficient in number to keep it constantly occupied, but that should it at any time be unoccupied by the Commissioners' vessels, and any

outside vessel in urgent need be unable to find dock accommodation elsewhere, the Commissioners would then probably not find themselves debarred from assisting the shipping of the port by making their dock available.

The Committee of the Chamber recognise in this concession a desire on the part of the Commissioners to further the interests of the shipping of the port so far as they legitimately can ; but there is an impression that the Commissioners have a feeling that in allowing their dock to be used by the public they will be competing with other docks and interfering with private rights. Lest the Commissioners have such a feeling, the Committee would here state that they would much deprecate Government or quasi-Government interference or competition of any kind with the existing public docks or any such trade interests, and they would point out that at present the following docks only are available in Calcutta :—

Caledonia Dock, with a length of	227	ft. and entrance	45	ft.
Hooghly	278	„ ...	44	„
Commercial	222	„ ...	38	„

It will thus be seen that now that the Calcutta dock has passed into the hands of the Commissioners, there is not another open to the public capable of accommodating a vessel of even 280 feet in length, whereas many of the vessels now visiting the port measure 300 to 400 feet.

It will be clear, then, to the Commissioners, that by taking vessels of greater length than 280 feet into their docks, they will not be interfering with such other docks as are open to the public. In addition to the docks named, however, there are the private docks, two in number, of

the British India Steam Navigation Company; and while the Committee of the Chamber acknowledge the obligingness of Messrs. Mackinnon, Mackenzie & Co., in accommodating outside vessels from time to time, they have to observe that, unlike the public Companies, that firm does not register applications for docks and take in vessels in order of registration, but hold the docks for their own private work, and only allow their use by others as a matter of favour when it is convenient, making it a condition that outside vessels permitted to use them must vacate them on notice, even if incomplete in repairs, so as to prevent any inconvenience to, or delay of, the British India Steam Navigation Company's own vessels.

The Chamber do not wish the Commissioners to do anything to interfere with Messrs. Mackinnon, Mackenzie & Co., or any other firm or individual who can give dock accommodation, but at times when that accommodation is not available, they do not see why the Commissioners should not, if able to do so, readily place theirs at the public disposal. In this way the shipping of the port will be much better provided for than at present.

It is probable that the Commissioners may not be able to give more accommodation to the public than Messrs. Mackinnon, Mackenzie & Co. give, but the fact of having accommodation from the Commissioners in addition to that from Messrs. Mackinnon, Mackenzie & Co. will be of benefit to the shipping.

In the matter of labor and of repairs to machinery, if the Commissioners are averse to undertaking such work, there will be no difficulty in getting such undertaken by

firms in the trade if the Commissioners will but allow the use of their dock.

The Committee of the Chamber think they have clearly shown that the Port Commissioners would not, in so far meeting a most important requirement of the shipping of the port, be competing with private interests, and they would ask the favor of the Commissioners reconsidering their decision.

From the Port Commissioners to the Chamber.

No. 1654—*The* 1*st August* 1883.

I am directed to acknowledge receipt of your letter of the 11th July 1883, on the subject of the Commissioners' dock being made available under certain circumstances for vessels other than those belonging to the Port Commissioners.

The letter was considered by the Commissioners at a meeting held on the 25th July 1883, and in pursuance of a resolution passed thereupon, I am to invite the attention of the Chamber to the orders of Government contained in para 18 of the resolution (published in the *Calcutta Gazette* of the 25th July 1883) recorded in the Port Commissioners' Administration Report for the year 1882-83, from which it will be seen that the Commissioners have the sanction of Government to make the dock available to vessels other than their own.

18. "*An important step taken by the Commissioners during the year, with sanction of the Government, was the purchase of the Calcutta Docking Co.'s premises*

situated immediately to the north of the Hooghly Bridge. The possession of a dock for the exclusive use of the Commissioners' vessels and boats had become an urgent necessity, especially since the transfer to the Commissioners' charge of the Port approaches, with the light-ships and the vessels of the River Survey. At the same time, in view of the limited docking accommodation existing in Calcutta, the Lieutenant-Governor approves of the intimation conveyed to the Chamber of Commerce that if at any time hereafter the dock is unoccupied by vessels belonging to the Commissioners, and an outside vessel is in urgent need of docking and cannot find accommodation elsewhere in the port, the Commissioners would be disposed to assist the shipping of the port by making their dock available. The opening of the dock to the public under such circumstances could give no reasonable ground for complaint that the Commissioners were entering into competition with private docks."

GOVERNMENT STOCK-NOTES.

THE opinion of the Chamber having been requested by the Government of Bengal on the subject of Stock-notes, and what course they could suggest to render these more popular as an investment, the Committee replied, that in their opinion the issue of such notes would never give Government satisfaction, that they were not suited to the wants of the thrifty poor, who would naturally prefer the safety and advantages offered by

the Government Savings Banks to the risk of holding stock-notes, liable as these were to loss by insects, fire, and theft, and subject, moreover, to market depreciation, while the better-off classes would certainly prefer the ordinary Government loans.

The Committee further remarked that shroffs and others who had invested in these notes on their first issue, more to oblige Government than because of their faith in such investment, are now unable to realize save at a loss of from 5 to 6 per cent.

From Government of Bengal to Chamber.

No. 15*T-F.—Darjeeling the* 15*h September* 1883.

I AM directed to forward copies of Resolutions of the Government of India, in the Department of Finance and Commerce, noted in the margin, on the subject of encouraging investments in stock-notes, and to request that the Lieutenant-Governor may be favoured with the views of the Chamber on the points discussed in the Resolutions.

No. 2599, dated 10th August 1883, with Appendix A.
No. 1438, dated the 8th March 1883.

From Chamber to Government of Bengal.

Calcutta, 3rd November 1883.

I am desired by the Committee of the Chamber to acknowledge receipt of your Circular letter to the address

of the President, No. 15T-F, in the Financial Department, dated 15th September last, forwarding certain Resolutions of the Government of India on the subject of encouraging investments in stock-notes, and requesting that the Lieutenant-Governor may be favoured with the views of the Chamber on the points discussed in the said Resolutions.

In reply, I am directed to state that the Committee consider that stock-notes will never give the Government satisfaction. As an investment they are not at all adapted to the wants of the thrifty poor, while the better-off will prefer the ordinary Government loans. The Government Savings Banks are much better suited to the requirements of the poor than stock-notes ever can be, and in the opinion of the Committee the sooner this is recognised and the issue of stock-notes stopped and Savings Banks' advantages extended in the country the better. It is known to the Chamber that shroffs and others, on the first issue of stock-notes, took them to a considerable extent more to please Government than because of their faith in them, and have suffered for their obligingness. There is no need to disguise the fact that stock-notes are in bad repute, holders of them want to get rid of them, and cannot do so except at a sacrifice of 5 or 6 per cent. The poor wisely prefer putting their money in the Savings Banks where they are sure of their interest without the risk of losing any part of the principal by destruction, theft, or market depreciation. The Committee cannot suggest any way of popularising stock-notes which would be satisfactory to Government.

TELEPHONE SERVICE.

THE opinion of the Chamber having been requested by Government as to whether the working of the Telephone service as established by the Oriental (Bengal) Telephone Company was considered satisfactory by the mercantile community, a reference on the subject to 42 firms and Bank Managers, members of the Chamber, resulted in the statement returned to Government in letter dated 20th August 1883, printed below.

From Government of Bengal to Chamber.

No. 1957 *M. P. J.—Dated Calcutta, the* 19*th July* 1883.

I am directed by the Lieutenant-Governor to request the favor of the opinion of the Chamber of Commerce as to whether the working of the telephone service, which has been established in Calcutta by the Oriental Telephone Company now for some time, is considered satisfactory by the mercantile community.

From Chamber to Government of Bengal.

Calcutta, 20*th August* 1883.

I have the honor to acknowledge your official communication No 1957, dated the 19th ultimo, requesting the opinion of the Chamber as to whether the working of the telephone service which has been established here by the

Oriental Telephone Company is considered satisfactory by the mercantile community.

In reply I have to inform you that 42 Firms and Banks—members of the Chamber—have been consulted, with the following results, *viz* :—

20 per cent say that the working has been to their entire satisfaction.

20 per cent that it works well on the whole, and as a rule.

7 per cent that the working is only fairly satisfactory.

23 per cent that the working gives only qualified satisfaction : (they approve of the scheme, but consider the instruments defective, and the arrangements at Central Exchange imperfect).

20 per cent that they find the working very unsatisfactory (one firm states that it has already discontinued subscribing, and another that it is its intention not to renew its subscription) and

10 per cent that they have not had the telephone brought into their offices.

As regards the yearly subscription to the service, the matter has been commented upon by two firms only ; one thinks the amount of subscription should be reduced, and the other remarks that the convenience afforded by the service is not commensurate with a yearly payment of Rs. 300.

STAMPING DUPLICATE RECEIPTS.

THE attention of the Committee was drawn to this matter by a notification that appeared in the *Calcutta Gazette* of the 15th August last, emanating from the Board of Revenue, and repeated by the Collector of Calcutta in the *Calcutta Exchange Gazette* of the 13th September, to the effect that any person signing a duplicate receipt when the amount exceeded Rs. 20 without the same being duly stamped was liable to be criminally prosecuted. A certain case, it appears, had been referred to the Advocate-General for opinion as to whether the duplicate receipt in the transaction referred to was not subject to stamp duty. His reply was in the affirmative, and thereupon the notifications in question were published. In writing to the Board of Revenue on the subject, the Committee pointed out that the custom of giving duplicate vouchers for payments without stamping the duplicate is a very old one, and has been generally adopted throughout India for many years without exception having been taken thereto by the Executive until now; that if this very old custom is now to be overridden by a new reading of the law the Committee hoped that the Board would move for a re-consideration of the matter.

As to the case submitted to the Advocate-General, and upon which he gave the opinion stated, it was pointed out to the Board that in the opinion of the Committee the case had not been so clearly stated as it might have been, that the question on which he should have been asked to advise was, if it were necessary to stamp a duplicate document not intended to be used in the place of an original existing and available stamped one. The Committee conceded that in the absence of the original, the duplicate, if required for use, should be stamped, but not otherwise; and this they contend to be the true meaning and intent of the Act.

From Chamber to Board of Revenue.

Calcutta, 3rd November 1883.

I have the honor, by desire of the Committee of the Chamber, to address you regarding the Resolution of the Government of India in the Department of Finance and Commerce, published by order of the Board in the *Calcutta Gazette* of the 15th August last, as follows:—

"*Simla, 20th July* 1883.—The attention of the Board of Revenue, Lower Provinces, was recently directed to a case in which a Bank had granted a duplicate receipt to another Bank on unstamped paper, although the original receipt was stamped with a duty of one anna, and the money for which the duplicate receipt was granted was

required to be accounted for to a party other than the depositor. The case was referred to the Advocate-General for opinion as to whether the duplicate receipt was liable to stamp duty, and the following opinion was given by him.

"A receipt for money is an instrument within the "meaning of the Stamp Act, (Act I of 1879). It follows "that a duplicate receipt mentioned in this case is liable "to a stamp of one anna under article 23 (*a*) of Schedule I.

"2. The Governor-General in Council is pleased to direct that steps be taken to make the opinion of the Advocate-General known to the public."

With reference to this the Committee would remark that the custom of granting receipts in duplicate,—the originals only being stamped,—for payments made in respect of third parties, is a very general one throughout India, and has been in practice for many years without exception having been taken thereto by the Executive; and as it appears to the Committee that the Resolution referred to can scarcely have reference to the stamping of such duplicates, they desire me, since no particulars of the case laid before the Advocate-General appear to have been published, to request that they may be favoured with such particulars, that they may know the circumstances under which the Advocate-General gave the opinion recorded.

The Committee would further remark that the Collector of Calcutta has issued a Notification under date the 13th September which, published in the *Calcutta Gazette* of the 19th idem, is as follows :—

"It is hereby notified for information of the public that a duplicate receipt for an amount exceeding Rs. 20 is liable to a stamp duty of one anna under article 23 (*a*). Schedule I of Act I of 1879, and should under section 16 of the Act be stamped before or at the time of execution, If the duty payable on the duplicate receipt is denoted by an adhesive stamp, such stamp should be cancelled, so that it cannot be used again. Any person signing a duplicate receipt when the amount exceeds Rs. 20, without the same being duly stamped, is liable to be criminally prosecuted under section 61 of Act I of 1879, and punished with a fine which may extend to Rs. 500, and any person neglecting or omitting to effectually cancel the adhesive stamp used in payment of stamp duty renders himself liable to a fine which may extend to Rs. 100.

"The attention of the Banking, Mercantile and Trading community is especially drawn to the requirements of the law on this point."

With reference to this, I am to state that the Committee consider such a measure quite uncalled for, and unduly hard upon the already overburdened mercantile community, and that they feel compelled to protest strongly against it.

To give duplicate vouchers for payments without stamping the duplicate is a very old custom. The original as stamped continues in existence, and is the voucher proper on which any action would be taken. If the original were destroyed and a duplicate granted, then the Committee can understand that a stamp would be necessary, but they fail to see on what grounds any person signing a

duplicate receipt unstamped and issuing it with the original one stamped can be criminally prosecuted. If the very old custom with regard to duplicate receipts is to be overridden by a new reading of the law, then the Committee hope your Board will move for a reconsideration of the law, that this new and unnecessary imposition may not be permitted to burden trade.

From Board of Revenue to Chamber.

No. 1355 *B.—Dated Calcutta the 7th December* 1883.

I am directed by the Board of Revenue to acknowledge the receipt of your letter, dated 3rd November 1883, regarding an opinion given by the Advocate-General that a duplicate receipt is liable to a stamp duty of one anna under article 23 (*a*) of Schedule I of the Indian Stamp Act I of 1879, and, with reference to the request therein contained for a fuller statement of the case on which the Advocate-General gave his opinion, to say that all the material facts are given in the Government of India's Resolution No. 2153, dated 20th July 1883, published at page 684, part I of the *Calcutta Gazette* of the 8th August 1883. Any representation which the Chamber may wish to make to obtain a modification of the law should be submitted to Government. The Board's province is to make known and give effect to the provisions of the law as given in the Advocate-General's opinion referred to, the soundness of which, I am to observe, the Chamber apparently do not contest.

From Chamber to Board of Revenue.

Calcutta, 20th December 1883.

I am directed by the Committee of the Bengal Chamber of Commerce to acknowledge receipt of your letter No. 1355, dated the 7th instant, stating, in reply to the Chamber's letter dated the 3rd ultimo, that all the material facts on which the Advocate-General gave his opinion ragarding the stamping of duplicate receipts are given in the Resolution of the Government of India published at page 684 of Part I of the *Calcutta Gazette* of the 8th August last, and intimating that any representation which the Chamber may wish to make, to obtain a modification of the law, should be submitted to the Government.

In reply, I am directed to thank you for the intimation conveyed in the latter portion of your letter, but at the same time to state that the Committee consider that your letter is scarcely a full reply to theirs above referred to, inasmuch as their request to be furnished with a copy of the case in its entirety, as placed before the Advocate-General, and upon which he gave the opinion published in the *Calcuta Gazette* of the 8th August before alluded to, has not been complied with, and they are consequently still only in the position they were before their request was made.

The occasion for their being placed in possession of the full particulars of the case is now the more urgent, in order that there may be on their part no mistake as to the true representation of same, when, as they propose to do, they address Government regarding a modification of the law.

I am therefore again directed to solicit that they may be favoured with these particulars as early as convenient.

From Board of Revenue to Chamber.

No. 36B.—*Dated Calcutta the* 11*th January* 1884.

Stamps.
H. A. COCKERELL, ESQ., C. S. I.

I am directed to acknowledge receipt of your letter of the 20th December 1883, asking to be furnished with the particulars of the case as placed before the Advocate-General on which he gave the opinion quoted in the Resolution of Government of India, No. 2153, dated 20th July 1883.

In reply, I am directed to forward to you a copy of the letters (omitting names) which were laid before the Advocate-General.

From———*to the Commissioner of*———

Dated the 9*th February* 1883.

Revenue Department
Stamps.

Under section 45 of the Indian Stamp Act, I have the honor to submit the following case for the decision of the Board of Revenue.

The enclosed is a *duplicate* receipt granted on the 19th January 1883 by the Bank of———in favor of the ———Bank of———for the sum of Rs.———, which has been sent to this office at my request by the latter. As the amount for which the receipt was granted is

required to be accounted for by the Bank of———to another party than the depositor, this receipt does not come within the purview of clause *(b)* of article 15 of the exemption Schedule II annexed to Act I of 1879, and I have been given to understand by the——— Bank that its original was properly stamped.

The question now at issue is whether or not this duplicate receipt is chargeable with stamp duty as well as the original. It will appear on a reference to article 23 of Schedule 1, of Act 1 of 1879, that a stamp duty is payable on the duplicate of any instrument (whatever it may be), provided the original is chargeable under the Act. The duplicate receipt under review is, I consider, therefore chargeable with a stamp duty of one anna.

The practice of granting duplicate receipts on unstamped paper is common in———, and I believe that in most cases it is done in ignorance of the requirement of the law. With a view, therefore, of putting a stop to this irregular practice, I beg to suggest that if in the opinion of the Board of Revenue this or any duplicate receipt the original of which is not exempted is considered chargeable with a stamp duty, that fact may be advertised in a notification in the——— Gazettes by which the public may be warned of the penalty prescribed in section 61 of the Stamp Act against the use of duplicate receipts without the same being duly stamped.

The return of the enclosure is solicited when no longer required.

In conclusion, I beg to state that, as a rule, such duplicates never come officially before any Government

officer, so that there is no likelihood of these documents becoming impounded, but I am convinced that the Bank and other business firms have only to be informed of the necessity of stamping such documents to ensure their doing so.

From————*Commissioner of*————*Division to Board of Revenue.*

Dated the 20th February 1883.

I have the honor to submit copy of a letter No. ————9th instant, from the Collector of————, together with the duplicate receipt referred to, and to solicit the orders of the Board on the question raised. I am very doubtful whether a receipt for a payment carrying with it no consideration is chargeable with stamp duty at all.

The return of the receipt is requested when done with.

From Chamber to Board of Revenue.

Calcutta, 23rd January 1884.

The Committee of the Chamber of Commerce direct me to acknowledge the receipt of your letter No. 36 B of the 11th instant, relative to the stamping of duplicate receipts and forwarding copies of letters which were laid before the Advocate-General.

The Committee desire me to thank you for furnishing them with the particulars of the case they asked for, but I am to say that they do not gather from these copies or

from your letter that the case has been put clearly before the Advocate-General, who, in their opinion, should have been asked if it were necessary to stamp a duplicate document not intended to be used in place of an original existing and available stamped one. If an original be lost or destroyed the Committee quite see that its duplicate should be stamped, but not otherwise ; and in their judgment that is the true meaning and intent of the provision of the section of the Stamp Act, No. 23 of Schedule I, and that it was never intended that the Act should apply to any duplicate receipt for a payment, carrying with it no consideration.

PUBLICATION OF MONTHLY STATEMENTS OF RAILWAY TRAFFIC.

From Government of India to Chamber.

No. 79, Simla the 8th May 1883.

I am desired to forward for your perusal and return a file of papers regarding the question of discontinuing the publication of the Reports on the fluctuations of traffic on the several Indian Railways now published in the Government Gazettes. This department will be glad to be favored with the opinion of the Chamber of Commerce as to whether these monthly statements are found of any use at present, and whether, if greater punctuality could be attained in publishing them, if for example, the traffic returns of each Railway Company for the month of May were published before the end of June, the returns would be more useful. I am also to ask whether, in the opinion

of the Chamber, any improvement in the form of the returns is possible.

The notes attached to the returns will show that at present they are not published until about 1½ or 2 months after the month to which they relate, and the question has therefore been raised whether the returns should not be discontinued as useless.

From Chamber to Government of India.

Calcutta, 11th June 1883.

The Committee of the Chamber of Commerce desire me to thank you for the opportunity of considering the subject submitted in your letter of the 8th of last month, and they desire me to say, in reply, that the statistical information regarding Railway traffic in the monthly statements published in the Government Gazettes is of much interest at all times, but their value would be greatly enhanced if they were published with greater punctuality.

If the returns can be issued as suggested, *viz.*, those for the month of May before the end of June, and a regularity of that interval maintained, the commercial community would find them more useful, and it would be a matter of regret if they were discontinued in consequence of any avoidable delay.

The papers you were good enough to forward are returned herewith.

DEVELOPMENT OF INDIAN WHEAT TRADE.

In June last your Committee placed themselves in communication with the Bombay Chamber with the object of securing their co-operation in an endeavour to get the Suez Canal dues reduced on cargoes of wheat from this country to the United Kingdom and other wheat consuming countries. It was suggested that by a liberal reduction of such dues India would be better enabled to compete with America in supplying Europe with wheat, and that a largely increased traffic in that product from this country would materially improve the income of the Canal Company, whose interest it is to encourage, as far as it can, the expansion of the wheat trade of India.

But it will be seen that the Bombay Chamber considered it desirable to hold the proposed representation in abeyance, as negotiations were then pending between Her Majesty's Government and the Canal Directory for the construction of another canal and the reduction of the tariff rates then levied, and accordingly no representation has yet been made.

From Chamber to Bombay Chamber.

Calcutta, 26th June 1883.

The memorial presented by your Chamber to the Governor-General in Council, on the 12th October 1872, praying for the repeal of the export duty on Indian wheat resulted in the remission of the duty from the 4th January of the following year.

The removal of that heavy tax—about 10 per cent.—on an article of comparatively small value, gave a considerable impetus to the trade, which has since expanded in a remarkable manner, and has now assumed importance enough to justify the public in looking forward to a time when, if properly encouraged, it may compete successfully with that of America in supplying the requirements of the United Kingdom.

It is unnecessary to give here the statistics of the exports of wheat during the past 10 years; it will be sufficient to record the fact that in 1881-82, the exports from the Bengal and Bombay Presidencies amounted to nearly one million tons (1,98,63,520 cwt.) valued at 8 millions sterling; and of that quantity about half was shipped to the United Kingdom, and half to the Continent of Europe.

In 1881 the importations into the United Kingdom from America were about 1,800,000 tons, of the value of about 20 millions sterling; and the above figures go to show that the control which America has so long had of the European markets is being materially lessened by

the gradual development of the grain producing capabilities of India.

In a recently published pamphlet—"Indian Wheat *versus* American Protection, or the influence on English Trade and American Protection of the Development of India,"—copies of which have been forwarded for your information, the author has discusssed with exceptional ability the main causes which are retarding the growth of the wheat trade of this country, its present position and future prospects, and the probable effects of the progress of that trade on certain branches of British commerce.

The chief contentions are—(1) that India is more than able to compete with America as regards the prime cost at which wheat can be raised and placed in the market; (2) that even allowing for the higher ocean-steamer freights from British Indian ports to England, this country, as a source of supply, has an undoubted superiority over America; (3) that in point of quality Indian wheat is not inferior to American, and (4) that the area of cultivation in India can be so extended as to supply the whole home demand, provided proper facilities and inducements are offered to bring the whole of the wheat producing districts of India under a proper system of cultivation.

And in all these respects the writer adds—"Thus, whether the question be viewed from the point of area, of quality, or of price, it appears that, after making the fairest allowance for the disadvantages against her in the matter of ocean-freight, India should be the principal source of supply for the wheat demand of England."

The author then proceeds to consider the question, why India has not attracted more of the English wheat trade; why it has not, in fact, monopolised it: and he answers the question by declaring that to bring into the open markets of the world the wealth of the agricultural produce of India, what is mainly required is *cheap* communication between the interior districts and the coast, and it is in this respect that India is so immeasurably behind her rival.

After various cogent arguments in favour of the development and extension of cheap railway communication, as being vital to the material prosperity of the agricultural classes of India, that the produce of their lands may have ready access to the markets of Europe, the author concludes by urging the more rapid construction of railways, and an improved system of working them more cheaply than is the case at present.

The pressing necessity for a more rapid extension of cheap railway communication, and for a reduction of rates on the present railways as far as can be conceded without loss to the Railway Companies or to Government, having regard to increased receipts from increased traffic, has already been brought prominently by this Chamber to the notice of the Viceroy and Governor-General, in a letter dated the 10th of last March, copies of which have been placed at your disposal, and the Chamber have received His Excellency's assurance that the important subject of their representation will receive His Lordship's early and careful consideration.

Apart, however, from the results of railway development there are other means by which the Indian wheat trade

can be assisted ; and the writer of the pamphlet we have mentioned, suggests that the trade in wheat in each Province should be narrowly looked into, with the view of having every charge in transit, tolls, canal fees, port dues, &c., either abolished or reduced to a minimum.

And this leads to the consideration of the more immediate subject of this letter, *viz.*, whether an endeavour should not be made by the united action of the Chambers of India interested in the matter, to bring under the notice of the Suez Canal Directory the expediency of assisting the wheat trade of this country. By a liberal reduction in the canal dues on the proportion of tonnage of each homeward bound ship represented by her wheat cargo, the wheat trade would be encouraged and increased to an extent which, it is thought, would more than recoup the Canal Company for such reduction.

The better India is enabled to compete with America in supplying Europe with wheat, the better it will be for the Canal Company; for American wheat does not help its income, and it is to the Company's interest to encourage the expansion of the Indian wheat trade as far as it legitimately can.

It is believed that with reduced railway rates and other intermediate charges, Indian wheat could be placed on the markets of England and Europe at a cost not exceeding that which American wheat now realises, and the volume of the trade would largely expand, while the Canal traffic would assume proportions of greater magnitude with greater earnings for the Company.

Requesting that you will favour my Committee with the views of your Chamber on the subject.

From Bombay Chamber to Chamber.

Bombay, 13th July 1883.

Your letter of the 26th ultimo in which you ask the views of this Chamber as to whether an endeavour should not be made by the united action of the Chambers of India, to bring under the notice of the Suez Canal Directory the expediency of assisting the wheat trade of this country by a liberal reduction in the Canal dues on the proportion of tonnage of each homeward bound ship represented by her wheat cargo, has been laid before the Committee of this Chamber.

They had directed me to inform you that the proposal had their entire approval, though they would have preferred that the representation were made in behalf of trade generally, and the great importance at the same time set forth of a liberal reduction being made in the Canal dues on homeward bound cargoes of wheat on account of the many disadvantages under which this country labors in her competition with America in that article. Before this letter, however, had been despatched, the public telegrams received yesterday announced that an agreement had been made between Her Majesty's Government and M. DeLesseps providing for the construction of another Canal, and for the reduction of the present tariff on January 1st next year, with other concessions. It is not stated what this reduction amounts to, but the Committee of this Chamber presume that your Chamber will probably now deem it desirable to hold the proposed representation in abeyance until further information in respect to the new tariff is

received. On this point, however, they will be glad to hear from you.

In conclusion, they desire me to add that they will at all times be happy to co-operate with your Chamber in every effort to encourage the expansion of the Indian wheat trade in every possible and legitimate way.

WHEAT CULTIVATION.

On a representation by the Bombay Chamber, the Government of Bombay recorded a Resolution relative to the expediency of improving the position of Indian wheat in the markets of Europe by urging upon growers the importance of preventing any admixture of other grain or foreign substances and impurities, the presence of which tends to lower prices being obtained than might otherwise be secured; and measures were accordingly taken to have this matter brought to the notice of the authorities in the wheat-producing districts and by them to the native cultivators.

Your Committee having been requested to help the Bombay Chamber in this movement, they at once communicated with the various local Governments, who, as will be seen from the correspondence, have taken up the matter with great promptitude and interest.

From Chamber to Govt. of the Punjab, Lahore.

Calcutta, 24th July 1883.

I am directed by the Committee of the Chamber of Commerce to submit for the consideration of His Honor the Lieutenant-Governor the enclosed Resolution of the Government of Bombay, on a representation by the Bombay Chamber, relative to the expediency of steps being taken to urge upon growers of wheat the importance, in their own interests, of preventing admixture with the wheat of other grain or foreign substances and impurities, which tends to lower prices being obtained than might otherwise be secured.

In placing this matter before His Honor, the Committee direct me to express their hope that similar orders may be issued by the Government of the Punjab to Commissioners or other authorities of districts where wheat is cultivated for exportation.

It has also been suggested that the cultivation of wheat would be improved and the admixture of inferior grains prevented if Government were to offer, through local officers in the wheat growing districts, small prizes for the best farmed field in which no other grains were grown, and the Committee of the Chamber venture to recommend the suggestion to His Honor's notice.

No. 4738.

WHEAT.

REVENUE DEPARTMENT,

Bombay Castle, 23rd June 1883.

Letter from the Secretary, Chamber of Commerce, dated 7th June 1883 :—

"In the memorandum regarding the cultivation of wheat, &c., in the Bombay Presidency, including Sind, forwarded to the Chamber with your letter No. 7181, dated 14th October 1882, and in other papers issued by Government on the same subject, reference is made to the well-known fact that the relatively low price of Indian wheat in the London market is not so much due to its quality, which is generally very good, but to its admixture with dirt and other inferior grains, and that this admixture of inferior grains with the wheat is due to the fact that cultivators often grow other grains in the same field as wheat, as a resource in the event of the failure of the wheat crop.

"2. As the trade in Indian wheat is rising to great importance, and as it is most desirable that this practice should be discontinued, and the position of Indian wheat improved in the markets of Europe, the Committee of the Chamber of Commerce desire me to request that His Excellency the Governor in Council may be pleased, in the interest of the country, to order the local officers of Government in all districts where wheat is grown to take whatever steps may be possible to prevent this admixture being resorted to."

Resolution.—Copies of the letter from the Chamber of Commerce should be forwarded to the Commissioner in Sind

and the Commissioners of Divisions, who should be requested to communicate the remarks of the Chamber of Commerce to the Collectors of wheat-producing districts in their respective Divisions, and desire the Collectors to urge on wheat growers the importance in their own interests of preventing admixture with the wheat of dirt, other grain, or other foreign substance which leads to their obtaining for the wheat produced by them a lower price than they might otherwise secure.

2. Copies should also be forwarded to the Survey and Settlement Commissioner and the political officers in charge, Native states, where wheat is grown. A copy should be sent to Mr. E. C. Ozanne on his return to duty.

(Sd.) J. MONTEATH,
Acting Under-Secretary of Government.

Circular No. 57A.

FROM

T. W. HOLDERNESS, ESQ., C.S.,

Offg. Secretary to the Government of India.

To

Rev. & Agri. Dept.
Agriculture.

Simla the 10th August 1883

SIR,

I am directed to forward the papers noted in the margin regarding the cultivation of wheat, and to suggest that instructions similar to those

From Bengal Chamber of Commerce, dated 24th July 1883.
Resolution of the Bombay Government, No. 4734, dated 23rd June 1883.

recently issued by the Government of Bombay to its district officers might, with the permission of His Honor the Lieutenant-Governor be issued by the Government of the Punjab.

2. The suggestion made by the Bengal Chamber of Commerce that prizes might be given for good cultivation seems also to merit consideration. The subject is one which might profitably engage the attention of district agricultural societies where they exist, and might be commended to their notice.

I have the honour to be,
SIR,
Your most obedient servant,
T. W. HOLDERNESS,
Offg. Secretary to the Government of India.

Circular No. 57A.

COPY of the above forwarded to the Secretary to the Bengal Chamber of Commerce, with reference to his letter dated the 24th ultimo.

By order,
T. W. HOLDERNESS,
Offg. Secretary to the Government of India.

From Government of the Punjab to Chamber.

No. 234. *Dated Lahore the* 13*th August* 1883.

Revenue
Agriculture.

I am directed by the Hon'ble the Lieutenant-Governor to acknowledge the receipt of your letter of the 24th ultimo

forwarding, by desire of the Committee of the Bengal Chamber of Commerce, a copy of a Resolution of the Government of Bombay relative to the expediency of steps being taken to urge upon wheat growers in that Presidency the importance of growing wheat without admixtures of other grains, and suggesting that similar orders may be issued in the Punjab, and inducements offered for the improvement of the cultivation of wheat.

In reply, I am to say that your letter has been transferred to the Agricultural Department of this Province for such action as may be practicable in the direction indicated by the Chamber.

Proceedings in the Revenue and Agricultural Department, 5A October 1883.

From E. B. FRANCIS, ESQ., *Offg. Junior Secretary to Financial Commissioner, Punjab, to the Offg. Junior Secretary to Government, Punjab.—No.* 1147, *dated* 17*th September* 1883.

In reference to your No. 110, dated 26th April last, and subsequent reminders, I am directed to forward, in original, for the information of Government, an intermediate communication from the Commissioner of Settlements and Agriculture relative to wheat cultivation in the Punjab stating the reasons of his inability to reply more fully at present to the enquiries made by Government, and enclosing for the perusal of His Honor the Lieutenant-Governor a copy of his circular addressed to all Deputy Commissioners on the subject.

2. It will be seen that careful enquiries are being made by Colonel Wace into all points relating to the

cultivation of wheat on which it is desirable to obtain information as suggested in the Government letter above quoted ; also as to the steps which can be taken towards encouraging the growth of better classes of wheat, and improving the practices of the trade. But to do all this, time is required, and Colonel Davies thinks it is not advisable to hurry the Commissioner of Settlements and Agriculture.

From Lieutenant-Colonel E. G. WACE, *Commissioner of Settlements and Agriculture, Punjab, to the Offg. Junior Secretary to Financial Commissioner, Punjab.—No.* 363, *dated Lahore, 4th September* 1883.

As the Junior Secretary, Government, Punjab, in his No. 233, dated 13th August, presses for a reply on the subject of wheat cultivation in the Punjab, I have the honor to ask that the enclosed copy of a circular letter No. 804, dated 21st June 1883, addressed by me to Deputy Commissioners, may be laid before Government.

2. The wheat sowings are now so near that no steps now to be taken could influence this season's crop. On the other hand, if I hurry District Officers in their replies, the results of the enquiry will be partly spoilt.

3. I am obtaining with fair rapidity returns of the areas cultivated with each variety of wheat, and also 2lbs. samples of each variety, and these will shortly be classified by the aid of the best advice that I can obtain at Lahore.

4. As to the mixing of the crop, varieties of wheat are rarely grown mixed, and the more valuable kinds need and receive both irrigation and the best husbandry.

5. For the mixing of the different varieties of wheat, and also I think for the dirty state in which it reaches the export harbours, the cultivator in the Panjab is but little responsible. These evils occur in the minor trade transactions which take place between the removal of the grain from the field and its loading up into the railway trucks. The entire arrangements of these minor grain dealers are of the roughest nature.

6. I state these conclusions intermediately. The results of the whole enquiry will shortly be laid before the Financial Commissioner. But meantime it may be useful to tell the Chambers of Commerce which have addressed Government that in the Punjab the cultivation of the finer kinds of wheat is usually very clean and careful, that the cultivators are not in a position to clean the grain with winnowing machines, and that most of the mixing and dirtying of the grain occurs not in the field but in the trade transactions which occur after the removal of the grain from the field.

From Major E. G. WACE, *Commissioner of Settlements and Agriculture, Punjab, to all Deputy Commissioners, Punjab.—No.* 804, *dated Lahore, 21st June* 1883.

I am directed by Government and by the Financial Commissioner to address you on the subject of paras. 21 and 22 of the Public Works Department Resolution No. 6436, dated 28th November last, which you will find in the *Punjab Gazette* of the 11th January 1883.

The Honorable the Lieutenant-Governor wishes :—

(i) That the chief firms of merchants exporting grain and the most intelligent agriculturists should be

consulted as to how cleaner, finer, and less mixed grain can be secured for the export trade ;

(ii) That samples of the different classes of wheat recognized by the English trade should be made available for inspection in each tahsíl and at each principal mart, and the Financial Commissioner further suggests that such samples should be placed in every Patwárkhána ;

(iii) That a broadsheet urging the cultivation of better wheat and its better preparation and preservation for the market be distributed to all Zaildárs and Patwáris in the principal wheat-producing districts.

3. In order to give effect to Government's wishes, I have the honor to request that you will send me one seer samples of each of the kinds of wheat cultivated in your district, with a statement in the form annexed. The samples should be put up in bags. The object of collecting these samples is to ascertain the present distribution of the different kinds of wheat. On receipt of the samples, an attempt will be made to classify them according to the nomenclature of the English market; and it will then be possible to distinguish by the names locally current the varieties preferred in the European market, and to place samples of such in the principal marts. It is particularly requested that the samples be good of their kind, and there should be sewn on to each sample-bag a ticket giving—

Name of district.
No. of sample in list.
Local name of the sample.

4. In the next place, I request the favor of your consulting the chief grain merchants and some intelligent agriculturists on the subject referred to in para. 2 (i) of this letter, and in paras. 21 and 22 of the Government's Resolution. In preparing the broadsheet suggested by Government, it would be desirable to propose such remedies as are capable of successful adoption. For instance, the finer kinds of wheat can only be cultivated on land advantaged by irrigation or by an abundant rain-fall. And it should be ascertained whether it is the cultivator that garners the grain in a dirty state, or whether the dirt is added when the grain is sent to market; and if so, whether by the cultivator or the trader. Clearly the remedies, which it is proper to suggest, depend primarily on the answer to these questions. If, however, inquiry shows that the cultivator is indifferent to the proper cleaning of the grain, it will still be for consideration whether, in the existing conditions of his husbandry and of his relations with the grain-dealers, we must look for the required cleaning of the grain to him or to the grain-dealer. It is also worth enquiring whether in cases in which a cultivator does not market his grain but stores it, he is alive to the necessity of storing it in clean condition. There is no question as to the interest of the exporter, nor as to the interest of the large grain-dealer who sells to the exporter. They must clean the grain; if they do not, a great deal of avoidable loss is suffered by them. But self-interest, trade, and profit are keen dividers of labour; and having regard to the circumstances of the cultivator, and the facilities at his command, is he so interested in making over his grain to the grain merchant in a clean state as to make it worth his while to attend to the matter.

5. In respect of the habit of sowing wheat mixed with other crops, you are requested to state generally to what extent this prevails, and the motive for which it is practised. Is it resorted to on good and safe lands, or is it confined to the unirrigated lands and relied on as a protection against the total failure of the produce, or for what reason? In addition, please report especially whether it is common to sow mixed different varieties of wheat, or whether the mixing of such varieties occurs in the grain stores.

6. I would also ask the favor of your reporting whether any, and if so what, arrangements have recently been introduced by the grain-dealers with the object of cleaning the grain before its despatch for export, and whether any agencies for the despatch of grain in large quantities to export towns or direct to Europe have recently been established in the principal marts of your district. From what I have heard independently, I believe that a great deal is being done in these directions in the larger marts of the Province.

7. A brief account of the principal grain marts, of the transactions of each for the past three years, and of the principal traders and agencies will be very acceptable and add to the value of your reply, as also if you will state the varieties of wheat hitherto most preferred for export by the local traders.

8. In districts under Settlement a copy of this Circular is being sent to the Settlement Officer also, in order that he may assist the Deputy Commissioner in furnishing the information called for.

From Government of N. W. Provinces and Oudh to Chamber.

No. 1877, *dated Naini Tal the* 22*nd August* 1883.

I am directed to acknowledge your letter, dated the 24th July last, regarding the encouragement and development of the Indian wheat trade; and, in reply, to state that the importance of the subject is fully recognised by this Government, and that the Lieutenant-Governor and Chief Commissioner is giving to it his careful attention.

RESOLUTION ON PORT COMMISSIONERS' ADMINISTRATION REPORT FOR 1882-83.

RESOLUTION.

READ—

The Administration Report of the Commissioners for making Improvements in the Port of Calcutta for the year 1882-83.

The usual statement of the liabilities and assets of the Trust are furnished at the beginning of the Report, but the total amount of the debt has not been correctly shown. The debt due on account of the debenture loan of 1881 is obviously the full amount of the loan, and not that amount minus the contributions to the sinking fund established for its liquidation, inasmuch as the sinking fund has been credited as an asset of the Trust. The sinking

fund rightly appears in the statement of assets, and credit should not be taken for it in the debt statement also. Subject to this correction, the figures of the report show that the Port Trust commenced the year with a total debt of Rs. 79,27,830, consisting of Rs. 51,62,830 due to Government on account of the consolidated repayable debt of Rs. 17,65,000, the non-payable book-debt, and of Rs. 10,00,000, the debenture loan raised in 1881. During the year the consolidated debt was reduced by the fixed annual payment on account of sinking fund, but another loan of 20 lakhs was contracted for new works, of which Rs. 12,25,000 were actually received by the Commissioners before the 31st March, and the total debt on that date stood thus :—

	Rs.
Consolidated repayable debt due to Government	50,67,967
Port book-debt not repayable ...	17,65,000
Debenture loan of 1881	10,00,000
Due on debenture loan of 1883 ...	12,25,000
Total ...	90,57,967

The assets of the Trust, on the other hand, exclusive of the value of the foreshore and Strand Bank lands, which the Commissioners received free of cost from the Government in 1870, amounted on the same date to Rs. 1,47,28,018. This sum represented the value, according to capital expended, of the Jetties, Wharves, Tramway, Moorings, Ships, Boats and other property belonging to the Trust, and the investments of the Jetty Reserve, the Jetty Insurance, the Port Reserve, the Depreciation

and the Debenture Loan Sinking Funds. The addition made to the value of all the Trust property during the year amounted to Rs. 12,94,412.

2. After opening with the account of the present financial condition of the Trust summarised in the last paragraph, the Report proceeds to mention the various works in progress during the year, and to describe the working of the several branches into which the management of the Port is divided, but it furnishes no review of the total income and expenditure of the year, either on revenue or capital account, and the general financial results of the twelve months' administration can only be gathered by reference to the figures given in the various sections or in the appendices. A statement of the total income and expenditure of the year, on both revenue and capital accounts, with such explanatory remarks as may be necessary, would, the Lieutenant-Governor thinks, add to the completeness of the report, and he hopes that this will find a place in future reports. For the past year it appears that the total receipts on capital account, inclusive of a balance of Rs. 6,53,199 from the previous year, were Rs. 39,25,042 and that the expenditure amounted to Rs. 29,09,862, leaving a balance of Rs. 10,15,180. The revenue accounts show a total income of Rs. 31,82,162, inclusive of a balance of Rs. 6,71,018 at the commencement of the year, against a total expenditure of Rs. 27,45,523, a sum of Rs. 4,36,639 being thus left in hand at the end of the year.

3. The expenditure on new works during the year amounted to Rs. 13,29,626, of which the Jetties absorbed

Rs. 5,31,914, the Inland Vessels' Wharves Rs. 43,135, the Tramway Rs. 1,95,942, the Howrah foreshore road Rs. 96,374, the reconstruction of the riverside Press-house, burnt down in February 1882, Rs. 1,41,899, new vessels for the Port approaches Rs. 2,46,292, and miscellaneous works Rs. 74,070. Of the outlay on the Jetties, 4¾ lakhs were expended on the extension of the jetty embankment, the building of new warehouses and the provision of additional engines and boilers for working the hydraulic cranes. The expenditure on the Inland Vessels' Wharves was mainly incurred for the construction of timber jetties for two Mills situated on the bank, and that on the Tramway for fresh rolling-stock and extensions of the lines and sidings. The new vessels purchased for the Port approaches were a steamer, costing Rs. 2,30,181 required for service at the Sandheads and for the River Survey, and a steam-launch. The construction of the Howrah foreshore road is advancing, but progress has been a good deal impeded by the failure of contractors to carry out their engagements, and by the difficulty of getting the occupiers of the lands taken up to remove and allow work to proceed. The section of the road between the Seebpore ghât road and Shalimar point, and an extension of 1,500 feet to Tateepara ghât road, have now been completed, and three out of the four timber depôts which formed part of the design of the former portion have been rented out and occupied by timber merchants. Among other works, the only one calling for notice is the reclamation of a strip of low ground at Kasipore which has been undertaken to provide for an extension of the Tramway. As surplus land which may be rented to private persons will be available after provision for

the requirements of the Tramway, the work is likely to prove remunerative.

4. The total Jetty receipts during the year were higher than those of any previous year, except 1877-78, when unusual activity prevailed in the grain traffic on account of the Madras famine. It is satisfactory to notice that the increase has taken place entirely on account of the larger quantity of goods shipped and landed, and in spite of the reduction of the landing charges on piece-goods and twist to 4 annas per bale as compared with 4½ and 5 annas charged before the 1st April 1882. The total income for the year amounted to Rs. 7,74,230 against Rs. 7,68,047 in 1881-82, and the expenditure to Rs. 6,44,032 against Rs. 5,47,861, leaving a net income of Rs. 1,30,198 as compared with Rs. 2,20,186 in 1881-82. The increase of expenditure in the past year was mainly due to the payment of a far larger contribution than in the previous year from this head of revenue to the port approaches, the contribution being needed to make up for the reduction of port dues from three annas to one anna per ton, which came into operation from the commencement of the year. The extent to which the Jetties have been used in the past three years is shewn in the following statement :—

Period.	Number of jetties.	Number of vessels accommodated.	Registered net tonnage.	Total number of days occupied at all jetties.	Total amount contributed by vessels for use of jetties.	Average length of stay at jetties.	Average number of days each jetty was at work throughout the year.	Average amount paid by each vessel for use of jetties.	Total jetty receipts from imports and exports.	Average per Vessel.	Average tonnage of vessels.
1880-81	8	193	324,187	1,982	78,762	10·2 dys.	248	Rs. 382	7,14,189	Rs. 3,700	1,680
1881-82	8	212	361,636	2,013	78,365	9·9 ,,	263	372	7,53,074	3,552	1,706
1882-83	8	199	375,907	2,161	77,672	10·8 ,,	270	390	7,58,283	3,810	1,889

Of the total income of the past year Rs. 6,63,162 were contributed by imports and only Rs. 95,121 by exports The balance consisted of miscellaneous receipts. Notwithstanding the increase in the quantity of goods shipped and landed, the removal and warehousing charges fell off by nearly Rs. 20,000, the loss being attributable to the greater promptitude with which goods can now be removed owing to the abolition of the customs duties. This is a clear gain to the mercantile community.

The floating 30-ton crane was under steam for 155 days of the year and earned Rs. 24,256, or about Rs. 4,000 more than in the previous year. The expenditure amounted to Rs. 12,661, and a net surplus of Rs. 11,595 was obtained.

5. As in the case of the jetties, the receipts at the Inland Vessels' Wharves, exclusive of the income from the Tramway, were the largest realised in any year except 1877-78, amounting to Rs. 4,07,133 against Rs. 3,81,937 in the previous year. The closing of the Chitpore Lock of the Circular Canals throughout the year, which caused a larger number of boats to resort to the wharves, doubtless contributed a good deal to this result. The expenditure was, however largely increased, chiefly in consequence of a contribution of Rs. 90,000 to the Port approaches as compared with only Rs. 38,507 in 1881-82, and the net revenue accordingly amounted to only Rs. 1,11,383 against Rs. 1,58,007.

6. A decline of over Rs. 10,000 in the receipts from the Strand Bank lands is accounted for by the destruction by fire of the Commissioners' riverside press in February 1882, which necessitated the grant of considerable remis-

sions of rent to the tenants while the press was under reconstruction. The total income amounted to Rs. 147,089 against Rs. 1,57,472 in the previous year, and the net revenue, after payment of all charges, was Rs. 25,192 against Rs. 45,913.

7. An increase in the number of vessels visiting the Port during the year caused a considerable addition to the income of the Harbour Masters' Department, which was further swelled by unusually high receipts under the head of "Wreck and Anchor," and by the realization, for the first time, of fees for the services of the Engineer-Surveyor, who arrived from England in June 1882, and is now attached to the staff of the Port Commissioners. The Wreck and Anchor receipts included payments on account of the wreck *Ellen Stuart* and of the American ship *Valiant*, which caught fire and was stranded, but was subsequently floated and discharged by the assistance of the Harbour Masters' Department. The total income from all sources was Rs. 5,97,873 against Rs. 4,81,872 in 1881-82; but the expenditure also increased from Rs. 4,61,468 to Rs. 5,87,812, and the net revenue thus amounted to only Rs. 10,061 against Rs. 20,404 in the previous year. Larger payments on account of fees earned by the Harbour Masters, a charge of Rs. 12,484 for the salary and passage money of the Engineer-Surveyor, and a contribution of Rs. 98,000 to the port approaches, account for the excess in the expenditure of the year.

8. The increase which has taken place in the number and tonnage of vessels frequenting the Port within the past five years is shewn in the following statement, Dhoonies, country craft, inland steamers, flats and boats are not included.

Years.	Arrivals.									Departures.								
	Number.			Gross tonnage.			Net tonnage.			Number.			Gross tonnage.			Net.		
	Steamers.	Sailing vessels.	Total.	Steamers.	Sailing vessels.	Total.	Steamers.	Sailing vessels.	Total.	Steamers.	Sailing vessels.	Total.	Steamers.	Sailing vessels.	Total.	Steamers.	Sailing vessels.	Total.
1878-79 ..	409	478	967	898,933	531,857	1,430,789	583,535	531,857	1,115,392	507	493	1,000	926,956	554,029	1,480,985	601,791	554,029	1,155,820
1879-80 ..	442	454	896	848,564	567,415	1,415,979	551,872	551,141	1,103,013	434	461	895	845,016	575,425	1,420,441	548.659	560,058	1,108,717
1880-81 ..	506	478	984	1,009,052	570,817	1,579,868	666,213	554,333	1,220,546	510	505	1,015	1,014,483	616,788	1,631,271	669,850	598,869	1,268,719
1881-82 ..	601	473	1,074	1,243,680	564,335	1,808,905	829,983	547,416	1,377,399	597	461	1,058	1,232,461	541,623	1,774,084	822,072	525,520	1,347,592
1882-83 ..	619	532	1,151	1,342,213	639,974	1,982,187	888,886	621,458	1,510,344	619	522	1,141	1,345,105	634,002	1,979,107	889,140	615,315	1,504,455

It will be observed that, while the number of sailing vessels which arrived in each of these years, has remained almost stationary, except in the past year when there was an unusual increase, the number of steamers shews a considerable and steady rise. Of the steamers arriving in the past year 208, with an average tonnage of 2,862 tons, came from European ports *vid* the Suez Canal, while in 1870-71 there were only 51 such arrivals with an average tonnage of 1,598 tons.

The development of the shipping trade is further exhibited in the following interesting statement, which goes back to the commencement of the present century: —

Year.		Number.	Tonnage.
1801	...	224	86,336
1811	...	240	97,686
1821	...	271	112,729
1831	...	256	96,439
1840	...	612	208,000
1845	...	688	255,000
1850	...	876	369,000
1855	...	1,097	647,581
1859-60	...	814	590,631
1864-65	...	1,206	997,756
1869-70	...	806	757,208
1874-75	...	927	1,280,604
1879-80	...	896	1,415,979
1880-81	...	984	1,579,868
1881-82	...	1,074	1,808,905
1882-83	...	1,151	1,982,187

9. Ten casualties occurred to ships while in charge of Harbour Masters during the year, fault being found with

these officers in three cases; but in no instance was the damage done of a very serious nature. The percentage of accidents was, however, somewhat higher than in the preceding year, being ·86 against ·65.

10. The fire-engine *Hooghly* was fortunately less frequently required than in the previous year, when several large and destructive fires occurred in the Port and along the banks of the river. It was called out ten times, but was actually used in only six cases, in five of which it was able to render useful service. The most serious of the fires broke out at the Camperdown Jute Press and the Chitpore Hydraulic Press, causing much loss at both places.

The dredger was employed on 181 days of the year at a net expenditure of Rs. 23,035, the average cost of every 1,000 cubic feet dredged being Rs. 18·33. The Lieutenant-Governor observes from Appendix A to the Report that all the moorings in the port have been seen to by the Deputy Conservator and Harbour Master, and from Appendix B that the port approaches have been made the subject of careful examination by Lieutenant Petley. The report by this officer shows that a great deal of good work has been turned out in the charts and tracings published and issued to Port Officers and Pilots. To make this portion of the report complete some information is needed regarding the portion of the river forming the port itself. Many works of importance are being executed on both banks, and it would seem desirable that the effect (if any) which these works have on the river should be recorded and reported for the information of Government. The Lieutenant-Governor would direct

the attention of the Commissioners to the subject, and hopes that it may be noticed in future reports.

11. The number of cargo and passenger boats surveyed registered, and licensed, and of manjees licensed, was as follows :—

		1882-83.	1881-82.
Cargo boats	...	5,942	5,643
Passenger ,,	...	2,148	2,145
Manjees licensed	...	9,431	8,527

A reduction of one-fourth of the rates of fees charged to these boats was sanctioned by the Government during the year, and has since taken effect.

The work done by the Engineer-Surveyor is stated in an appendix to the report. The substance of this statement, and of the reports of the Harbour Master and of the Deputy Conservator of the port approaches, might with advantage be summarised in the report in future. The number of vessels of all kinds surveyed during the year was 131, the total number of visits paid to them by the Surveyor was 398, and the fees realised were Rs. 3,970. In addition to this work, the Surveyor measured 11 vessels for tonnage ; surveyed and passed the condensers of 16 emigrant ships ; surveyed and measured for certificates 48 native passenger steamers, and held miscellaneous surveys on 16 vessels. His total earnings, however, fell far short of the expenditure incurred by the Port Commissioners in carrying out the surveys. Various questions connected with this branch of their administration have lately been brought to the notice of Government by the Commissioners, in reporting on the two Bills now before the Legislature for regulating surveys of inland steam-vessels and sea-going steam-ships respec-

tively, and their views will be communicated to the Government of India.

12. The working of the Commissioners' Tramway appears to have been entirely satisfactory during the year. The receipts amounted to Rs. 1,60,549, against Rs. 1,35,812 in 1881-82, and the expenditure to Rs. 1, 16,091, against Rs. 97,672, and the net revenue thus rose from Rs. 38,140 to Rs. 44,458. The quantity of goods received and despatched through to the Eastern Bengal Railway reached 209,430 tons, and 15,201 wagons were also loaded and despatched on local traffic. The corresponding figures for the previous year were 1,88,030 tons and 11,448 wagons.

13. The income and expenditure on account of the Port approaches inclusive of the River Survey, Buoying, and Lighting establishments, were as follow :—

Income.	Rs.	*Expenditure.*	Rs.
Receipts from Port dues	98,817	Salaries	1,86,939
Contribution from Port Trust revenue ...	3,07,500	Working expenses ...	1,38,335
Other Receipts ...	17,252	Repairs	99,102
		Other charges	11,993
Total ...	4,23,569	Total	4,36,369

The only direct income available to meet the expenditure for the port approaches is derived from the port dues, and these, owing to the reduction of the rate from three annas to one anna, now yield less than a lakh of rupees per annum, while the expenditure approaches 4½ lakhs. The balance has accordingly to be supplied by contributions from the receipts of the Port proper.

14. The usual surveys of the river channels were carried out during the year, and a revenue survey party

was also employed on the bank, for the purpose of connecting the permanent marks of the river survey with the great trigonometrical stations, and filling in the shore detail between Calcutta and Saugor. Some important changes were noticed in two or three of the channels leading to the Port, but no obstruction was apparently caused to navigation. The depth of water over the James and Mary bar is reported to have been unusually low in February and March last, owing to very weak freshets.

The light-houses at Saugor, Cowcolly, and False Point appear to have been efficiently maintained during the year, and the six light vessels were all brought up to town and repaired. An extensive encroachment of the Middleton Spit in the Saugor Roads rendered the placing of a light-ship on the spot advisable, and this was promptly done by the Commissioners. Special distinguishing marks for the day have also been introduced for the different light-vessels, and machinery has been ordered from home for the purpose of giving to each of the three outer lights a distinctive feature, which would render its immediate identification possible at night. The present system of burning blue lights and rockets at various intervals causes delay in the identification of the lights, unless they are first sighted shortly before the rockets or blue-lights are used. The whole question of lighting the mouth of the river has recently formed the subject of a special report by the Commissioners.

The refuge houses on the sea-face of the Sunderbuns, the duty of maintaining which has been accepted by the Commissioners, were visited three times in the course of the year. On each occasion it was found that the provi-

sions and clothing supplied for the needs of ship-wrecked seamen had been systematically stolen, and the trap-doors even had been taken off or destroyed. Exception appears to be made by the depredators as regards potted and tinned meats, which they do not affect, probably from ignorance of their uses and inability to open the tins. It may be as well experimentally to adopt the suggestion of the Deputy Conservator that the food supplies should be limited to these articles. The more frequent inspection of the places of refuge, which the two new steamers to be imported from England will facilitate, may tend to the better security of the goods and possibly to the detection of the offenders.

15. In the last section of the report, the Commissioners notice under the head of "Miscellaneous subjects" various important questions which came under their consideration during the year. The Diamond Harbour dock scheme was referred to them for opinion in communication with the Chamber of Commerce, and a joint Committee, including three members of the Chamber, has been appointed by them, and is now deliberating on the measures practicable for extending the accommodation of the Port. The Lieutenant-Governor recognizes that some delay must occur before matured proposals can be submitted on so large a subject, but its great importance in the interests of the export trade of the port and the pressure on the East Indian Railway Company demands early attention. The Lieutenant-Governor notes that the Commissioners recognise the urgent necessity of increased facilities for meeting the rapidly growing traffic "either in Calcutta itself or elsewhere."

16. The opposition with which the Commissioners' proposal to construct additional warehouses within the Jetty enclosure was received by the Calcutta Municipality, the British Indian Association, and other public and private bodies, was noticed in the Resolution on the last report. The warehouses were eventually sanctioned by the Government, and are now in course of construction. It is expected that one will be shortly finished, and the other before the close of the current year.

Objection was similarly taken to the erection of a tea warehouse by the Commissioners, but the Lieutenant-Governor being satisfied that the project would be of great benefit to the tea trade generally, sanctioned the introduction of a short Act in the last session of the Bengal Council to enable the Commissioners to undertake the work, and the measure has since received the assent of His Excellency the Governor-General in Council. The project will now be undertaken.

17. The experiment of opening the Jetty gates between 8 and 10 A.M. to facilitate the removal of goods, which was introduced at the instance of the Chamber of Commerce, having proved a failure, owing to the unwillingness of the agents of consignees and shippers to commence work before 10 o'clock, the Commissioners have reverted to the latter opening hour. They were quite justified, in the Lieutenant-Governor's opinion, in abandoning an arrangement of which no use was made.

18. An important step taken by the Commissioners during the year, with sanction of the Government, was the purchase of the Calcutta Docking Company's premises

situated immediately to the north of the Hooghly Bridge. The possession of a dock for the exclusive use of the Commissioners' vessels and boats had become an urgent necessity, especially since the transfer to the Commissioners charge of the Port approaches, with the light-ships and the vessels of the River Survey. At the same time, in view of the limited docking accommodation existing in Calcutta, the Lieutenant-Governor approves of the intimation conveyed to the Chamber of Commerce, that if at any time hereafter the dock is unoccupied by vessels belonging to the Commissioners and an outside vessel is in urgent need of docking and cannot find accommodation elsewhere in the Port, the Commissioners would be disposed to assist the shipping of the Port by making their dock available. The opening of the dock to the public under such circumstances could give no reasonable ground for complaint that the Commissioners were entering into a competition with private docks.

19. In reply to a reference from the Government, regarding the improvement of the means of conveyance on the river for persons residing on the banks and having business in Calcutta, the Commissioners reported during the year that, in their opinion, the establishment of a service of small steamers to ply at low fares between Calcutta and places in the neighbourhood, would probably prove a remunerative undertaking. The starting of such a service appeared to the Lieutenant-Governor to be beyond the legitimate sphere of Government enterprise, but he is glad to learn that it has since been undertaken by a private firm, and is likely to be soon established with every prospect of success. If this should result, the extension of the scheme to the reaches of the river above the bridge will probably follow.

20. The Lieutenant-Governor desires to thank the Commissioners for their efficient administration during the year, and he anticipates that they will be able to render valuable co-operation in the large projects under consideration for the extension of the commercial interests of the Port.

By order of the Lieutenant-Governor of Bengal

A. P. MACDONNELL.
Offg. Secy., Govt. of Bengal.

GOVERNMENT RESOLUTION ON PORT OFFICER'S REPORT FOR 1882-83.

Calcutta, the 7th August 1883.

RESOLUTION.

READ—

The Annual Report of the Port Officer, Calcutta, for 1882-83.

THE report is submitted by Lieutenant Brebner, who assumed charge of the Department at the close of the year, on the departure of Lieutenant Stiffe on furlough. Mr. Yates, Deputy Conservator of the Port, officiated as Port Officer for three months of the year.

2. The total strength of the Pilot Service at the end of the year, inclusive of 27 leadsmen apprentices, four of whom arrived during the year, was 89. Two casualties occurred among the pilots during the year; but as three leadsmen apprentices passed the pilot's examination, the number of qualified pilots was raised from 61 to 62. It was proposed by the Port Officer that the rules for the promotion of leadsmen apprentices should be so relaxed as to admit of first-mate leadsmen appearing at the pilot's examination after holding their first mate's certificates

for one year, without their having actually served in that capacity on board the pilot brigs; but the Lieutenant-Governor was unable to sanction the proposal. No public inconvenience was shewn to have as yet arisen from the strict enforcement of the rule requiring leadsmen apprentices to do duty as first-mates on board the pilot brigs for at least one year before their admission to the rank of pilots; and it was therefore deemed inexpedient to remit any portion of the training on board the brigs which has hitherto been insisted on. The system of obtaining the leadsmen apprentices from the training ships at home continues to work well; but the Port Officer rightly draws attention to the necessity for a very stringent medical examination of the candidates in England and for carefully testing their powers of vision.

3. The number of arrivals during the year was 1,157 vessels, with a gross tonnage of 1,982,187 tons, and of departures 1,141 vessels, with a gross tonnage of 1,979,107 tons, shewing an increase of 160 vessels and of 379,205 tons, inwards and outwards, over the previous year. The year under review, therefore, shews the largest number of ships that has ever been recorded for any year, except 1877-78, when the Madras famine caused an unusual development of the export trade in grain. Of the total number of arrivals and departures (2,292), 1,238 were steamers and 1,054 sailing ships, and of the latter 1,006, or 95·4, made use of tugs in proceeding up and down the river under pilotage charge. There was a further increase in the number of vessels of heavy draught, which has risen so greatly in recent years, as shewn by the following statement of vessels which drew 21 feet and upwards on their way up and down the river:—

	Above 21 to 22 feet.		22 to 23 feet.		23 to 24 feet.		24 to 25 feet.		25 to 26 feet.		26 to 27 feet.		Total 1882-83.		Total 1881-82.	
	In.	Out.	In.	Out.	In.	Out.	In.	Out.	In.	Out.	In.	Out.	In.	Out.	In.	Out.
Steamers ...	32	84	34	105	14	89	5	42	1	3	...	2	86	325	63	306
Sailing vessels ...	64	134	29	60	4	91	1	...	...	...	...	...	98	213	89	184
Total ...	96	218	63	165	18	108	6	42	1	3	...	2	184	538	152	490

The increase not only in the number but also in the draught of vessels has obviously added to the difficulty of pilotage in the Hooghly, as well as increased the work of the Pilot Service; and the Lieutenant-Governor is, therefore, glad to learn that the conduct of the Service generally continued very satisfactory during the year.

4. The earnings of the pilots have necessarily grown with the increase in the shipping of the port. During the year the Branch Pilots piloted on an average 5·23 vessels a month, the masters 4, and the mates 3, these averages being such as to afford ample remuneration to each grade, and to leave no room whatever for complaint. Forty-three vessels were also placed in charge of leadsmen apprentices, in the temporary absence of pilots in each case. While, however, the earnings of the Pilot Service have been larger, the mercantile community has also benefitted considerably from the reduction of pilotage by 15 per cent. carried out on the 1st August 1881. The amount thus remitted in the past year was Rs. 1,53,878.

5. The year was unfortunately marked by a large increase in the number of casualties to vessels in charge of pilots, 51 cases of grounding and 25 collisions having occurred against 33 cases of grounding and 12 collisions in the previous year. The groundings resulted, in one case in the total loss of the vessel, and in another in considerable damage; but in most of the remaining cases no damage was done. In five cases the pilot was warned, and in one case he was placed on half-earnings for three months. Of the collisions eighteen were either unimportant or accidental, and of the remaining seven cases one was due to the mismanagement of the pilot, three to

country boats, and one to the unskilfulness of the steam-tug pilot. Seven were attended with no damage, thirteen with damage, and one with serious damage. In one case an inland steamer, in another a steam-tug, and in two cases boats, were sunk. The total casualties of the year gave a percentage of 3·31 on the number of ships, as compared with 2·106 in the previous year.

6. Two Marine Courts and seven departmental enquiries were held during the year to investigate the conduct of pilots in connection with casualties which had occurred to vessels in their charge. In one case, already referred to, the pilot was severely censured and reduced to half-earnings for three months for grounding his ship on the edge of the Gasper Sands, and in another a steam-tug pilot was suspended for 12 months for unskilfulness in causing a collision between the vessel in tow of his steamer and another vessel riding at anchor in Diamond Harbour. The other cases resulted in the acquittal of the pilots. Besides these enquiries into the conduct of pilots, five Special Courts were convened under Act IV of 1875, to enquire into casualties to ships, and two investigations were held to ascertain the cause of the loss of the inland steamers *Oude* and *Goalpara*, in Garden Reach and the Sunderbuns respectively. The most important of the cases which came before the Special Courts were the wreck of the barque *Mohusser*, on Saugor Sand, on the 1st May 1882, with the loss of 36 lives, including 25 native passengers, and the stranding and abandonment of the barque *Aberdeenshire*, on Subtermookee shoal, in the Sunderbuns, on the 6th October 1882. The Court, in the former case, blamed both the master and the pilot; but

the latter on being subsequently tried, under Act XII of 1859, was acquitted. In the case of the *Aberdeenshire* the loss of the vessel was proved to have been caused by the unskilfulness of the commander; and it is to be regretted that he was not placed on his trial by the Court. The inland steamer *Oude* was sunk in consequence of collisions with two vessels in Garden Reach; and the inland steamer *Goalpara* by grounding on a mud lump at the junction of two rivers in the Sunderbuns. In both cases the masters were exonerated from blame.

7. The *S. S. Undaunted*, besides making the usual trips to the pilot and light-vessels at the Sandheads and visiting the Mutlah and the Orissa ports, was used during the year to tow a hulk laden with mooring tackle and an anchor boat to Chittagong, and to lay a whistling buoy on the South Patch Shoal lying beyond that port. One of the pilot brigs having been condemned, only two were available for service at the Sandheads during the year, The Lieutenant-Governor regrets the inconvenience which was, in consequence, occasionally caused to the shipping. A new brig is expected to reach the Port from home shortly.

8. Ninety-one candidates appeared for examination for colonial and local certificates of competency of the various grades, of whom 65 passed. The colonial certificates granted comprised 6 masters,' 11 first-mate's, 2 second mates's, 2 first-class engineers, and 6 second-class engineer's; and the local certificates, one master's, 1 first-mate's, 4 second mate's, 2 first class engineer's, 4 second-class engineer's, 23 engine-driver's, and 1 first-class engineer's and 2 second class engineer's, for inland service. There were seven

candidates for certificates as commanders of inland vessels, of whom six were successful. Five vessels were registered under the Merchant Shipping Act of 1854; and the registry of 16 was cancelled. One vessel only was registered under the Indian Act X of 1841. A and B certificates, under the Native Passengers Act VIII of 1876, were issued by the Port Officer during the year; while the surveys were carried out by the Port Commissioners' Engineer-Surveyor. This arrangement appears open to improvement, and the Lieutenant-Governor is now considering whether it would not be more convenient to place the granting of the certificates, as well as the surveys, in the hands of the Port Commissioners. The matter will be separately dealt with.

9. Lieutenant Stiffe's management of his department during the year was entirely satisfactory.

By order of the Lieutenant-Governor of Bengal,

A. P. MACDONNELL,

Offg. Secretary to the Govt. of Bengal.

No. 1839.

COPY of the Report and of this Resolution forwarded to the Bengal Chamber of Commerce, for information.

By order of the Lieutenant-Governor of Bengal,

C. W. BOLTON

Under-Secretary to the Government of Bengal.

CALCUTTA,
The 9th August 1883.

NEW MEMBERS.

Messrs. Browne and Lovelock and Messrs. Hurry Doss Dutt & Co., have been admitted as Members of the Chamber, subject to the usual confirmation.

FUNDS OF THE CHAMBER.

The balance at credit of the Chamber on the 31st December 1883, amounted to Rs. 831-0-2 exclusive of Rs. 10,000 in 4 per cent. Government Securities.

J. J. J. KESWICK,
President.

FUNDS OF THE CHAMBER.

Statement of the Funds of the Bengal Chamber of Commerce, from 1st May to 31st December 1883.

To Office Rent			1,200	0	0	Cash in Bank of Bengal on 30th April ...	349	0 2
„ Establishment			8,445	6	0	Government Securities do. ...	15,000	0 0
„ Charges General... ...			7,404	5	6			
„ Sundries as per last account paid off ...			1,038	10	11	Rs.	15,349	0 2
Rs.			18,088	6	5	Subscriptions ... 9,584 0 0		
						Price Current and other Publications ... 3,485 6 0		
Cash in Bank of Bengal ...	224	15 10				Interest on Government Securities ... 500 0 0		
Do. in hand ...	606	0 4				Difference between par value of Rs. 5,000 Government Securities sold, and sale proceeds including interest accrued ... 1 0 5		
Reserve in Government Paper	10,000	0 0					13,570	6 5
			10,831	0	2			
Rupees			28,919	6	7	Rupees	28,919	6 7

E. E.

H. W. I. WOOD,
Secretary.

APPENDIX.

MEMBERS OF THE CHAMBER OF COMMERCE.

Agelasto, A., and Co.
Apcar and Co.
Anderson, Wright and Co.
Acerboni, F., and Co.
Barlow and Co.
Begg, Dunlop and Co.
Burn and Co.
Barry and Co.
Balmer, Lawrie and Co.
Campbell, J., Esq., *Manager, National Bank of India.*
Carlisles, Nephews and Co.
Carritt and Co.
Crooke, Rome and Co.
Cohn Brothers and Fuchs.
Duncan Brothers and Co.
Dwarkanath Dutt and Co.
Ernsthausen and Oesterley.
Ewing and Co.
Elliott, John and Co.
Ezra, E. D. J., Esq.
Finlay, Muir and Co.
Forrest, W., Esq., *Agent, Chartered Bank of India, Australia and China.*
Gisborne and Co.
Graham and Co.
Grindlay and Co.
Gubboy, Elias S., Esq.
Harper, G., Esq., *Agent, Oriental Bank Corporation.*
Henderson, George and Co.
Heilgers, F. W. and Co.
Hoare, Miller and Co.
Huber and Co.
Hobson, Conor and Co.
Hodgson, J. G., Esq., *Agent, Hong-Kong and Shanghai Banking Corporation.*
Jardine, Skinner and Co.
Jefferson, W. E. S., Esq., *General Manager, The Planters' Stores and Agency Company, Limited.*
Kettlewell, Bullen and Co.
Kelly and Co.
Ker, Dods and Co.
King, Hamilton and Co.
King, W. Vale and Co.
Landale and Morgan.
Longmuir, Thos., Esq., *Manager, Delhi & London Bank, Limited.*
Murray, R., Esq., *Agent, Chartered Mercantile Bank of India, London and China.*
Mitchell, Reid and Co.
Mackillican, J. and Co.
Mackinnon, Mackenzie and Co.
Mackenzie, Lyall and Co.
Macneill and Co.
Macknight, Anderson and Co.
McIntosh, A. R. and Co.
Mitchell and Waller.
Moran, W. and Co.
Oldemeyer and Hadenfeldt.
Payn, T., Esq., *Manager, Comptoir d'Escompte de Paris.*
Petrocochino Brothers.
Prawnkissen Law and Co.
Prestage, F., Esq., *Agent, Eastern Bengal Railway Company.*
Pigott, Chapman and Co.
Pallachi, F. C. and Co.
Ralli Brothers.
Ralli and Mavrojani.
Reinhold and Co.
Rentiers and Co.
Schroder, Smidt and Co.
Schoene, Kilburn and Co.
Sassoon, David and Co.
Sallugram Khunnah and Co.
Steel, Octavius and Co.
Struthers and Co.
Thomas J., and Co.
Turner, Morrison and Co.
Ullmann, Hirschhorn and Co.
Uloth, H. W., Esq., *Superintendent, P. & O. Company.*
Whitney, Brothers and Co.
Williamson, Magor and Co.
Wood, W., Esq., *Manager, Agra Bank.*
Yule, Andrew and Co.

Honorary Members:

J. A. Crawford, Esq., C. S., late Collector of Customs.

Major L. Conway-Gordon, R. E.

RULES AND REGULATIONS

OF THE

BENGAL CHAMBER OF COMMERCE.

First....That the Society shall be styled "THE BENGAL CHAMBER OF COMMERCE."

Second...That the object and duty of the Bengal Chamber of Commerce shall be to watch over and protect the general commercial interests of the Presidency of Bengal, and specially those of the port of Calcutta; to employ all means within its power for the removal of evils, the redress of grievances, and the promotion of the common good; and, with that view, to communicate with Government, public authorities, associations, and individuals; to receive references from, and to arbitrate between, parties willing to abide by the judgment and decision of the Chamber; and to form a code of practice to simplify and facilitate transaction of business.

Third....That merchants, bankers, ship-owners, and brokers shall alone be admissible as members of the Chamber.

Fourth...That candidates for admission, as members of the Chamber, shall be proposed and seconded by two members, and may

be elected by the Committee provisionally, such election being subject to confirmation at the next ensuing General Meeting.

Fifth.....That the subscription of firms and banks shall be 16 rupees per mensem, of individual members 10 rupees per mensem, and of mofussil members 32 rupees per annum.

Sixth.....That any member of the Chamber whose subscription shall be three months in arrears shall cease to be a member, and his name shall be removed by the Committee from the list of members after one month's notice of such default.

Seventh...That the business and funds of the Chamber shall be managed by a Committee of not less than five nor more than seven members, including the President and Vice-President, to be elected annually at a General Meeting of the Chamber in the month of May; the President, or, in his absence, the Vice-President, being ex-officio Chairman of the Committee, and in the absence of the President and Vice-President, the Committee to elect its own Chairman. Three to form a quorum.

Eighth...Annual elections of President, Vice-President, and members of the Com-

mittee shall be determined by a majority of votes of members, such votes being given in voting-cards to be issued by the Secretary, numbered and bearing his signature; and no voting-card shall be received for such purpose unless so authenticated. All vacancies created by the absence of the President, or Vice-President, from the Presidency for three months, or by departure for Europe, or by death, shall be forthwith filled up, and the election determined by votes to be taken as above and declared by the Committee. All vacancies created as above by the absence, departure, or death of any of the members of the Committee, shall be forthwith filled up by selection by the Committee, subject to approval at first Ordinary General meeting thereafter.

It is specially requested that before a member is returned to serve on the Committee, his nominator shall have ascertained his willingness to accept office in the event of his election by voting-cards.

Ninth....That parties holding powers of procuration shall, in the absence of their principals, be eligible to serve as members of the Committee.

Tenth....Two members of a firm, or representatives of a bank, shall not serve on the Committee at the same time.

Eleventh....That the Committee shall meet for the purpose of transacting such business as may come within the province of the Chamber at such times as may suit their convenience, and that the record of their proceedings be open to the inspection of members, subject to such regulations as the Committee may deem expedient.

Twelfth....That all proceedings of the Committee be subject to approval or otherwise of General Meetings duly convened.

Thirteenth....That a half-yearly report of the proceedings of the Committee be prepared, printed, and circulated for information of members three days previous to the General Meeting at which such report and proceedings of the Committee shall be submitted for approval.

Fourteenth....That the Secretary shall be elected by the Committee; such election to be subject to confirmation at the next ensuing General Meeting.

Fifteenth....That General Meetings of the Chamber shall be held at such times as the Com-

mittee may consider convenient for the despatch of business.

Sixteenth....That any number of members present shall be held to constitute a General Meeting, called in conformity with the Rules of the Chamber for the despatch of ordinary business.

Seventeenth....That on the requisition of any five members of the Chamber, the President, or, in his absence, the Vice-President, or Chairman of Committee, shall call a Special General Meeting, to be held within 15 days subsequent to receipt of such requisition.

Eighteenth....That every subscribing firm or bank shall be entitled to one vote only, and that the Chairman of Committee and Chairman of General Meetings and Special General Meetings shall have a casting vote in cases of equality of votes.

Nineteenth....That parties holding powers of procuration shall, in the absence of their principals, be entitled to vote.

Twentieth....That voting by proxy shall be allowed; provided proxies are in favour of members of the Chamber.

Twenty-first....That the Chamber reserves to itself the right of expelling any of its members;

such expulsion to be decided by the votes of three-fourths of members present in person or by proxy at any Special General Meeting of the Chamber convened for the consideration of such expulsion.

Twenty-second.—That strangers visiting the Presidency may be admitted by the Committee as honorary members for a period not exceeding two months.

Twenty-third.—That no change in the rules and regulations of the Chamber shall be made, except by the votes of a majority of the members of the Chamber present in person or by proxy at a Special General Meeting to be held after previous notice of three months.

SCHEDULE OF COMMISSION CHARGES

Revised and adopted by a Special General Meeting of the Bengal Chamber of Commerce, held on the 18th June 1861,—with effect from 1st January 1862.

1.	On the sale, purchase, or shipment of Bullion, Gold Dust or Coin	1	per cent.
2.	On the purchase (when in funds) or sale of Indigo, Raw Silk, Silk Piece-Goods, Opium, Pearls, Precious Stones, or Jewellery	2½	,,
3.	On purchasing ditto when funds are provided by the Agent	5	,,
4.	On the sale or purchase of all other goods—the commission in all cases to be charged upon the gross amount of sales, and in regard to purchases upon both cost and charges ...	5	,,
5.	On returns for Consignments if made in produce ...	2½	,,
6.	On returns of Consignments if in Bills, Bullion, or Treasure	1	,,
7.	On accepting Bills against Consignments ...	1	,,
8.	On the sale or purchase of Ships, Factories, Houses, Lands, and all property of a like description ...	2½	,,
9.	On goods and treasure consigned, and all other property of any description referred to Agency for sale, whether advanced upon or otherwise, which shall afterwards be withdrawn; and on goods consigned for conditional delivery to others and so delivered, on invoice amount at 2*s.* per rupee	half com.	
10.	On making advances or procuring loans of money for commercial purposes, when the aggregate commission does not exceed 5 per cent. ...	2½	per cent.
11.	On ordering, or receiving and delivering goods, or superintending the fulfilment of contracts, or on the shipment of goods, where no other commission is derived	2½	

12.	On guaranteeing Bills, Bonds, or other engagements, and on becoming security for administration of Estates, or to Government for the disbursement of public money	2½	per cent.
13.	On *del-credere*, or guaranteeing the due realization of sales	2½	„
14.	On the management of Estates for Executors or Administrators	2½	„
15.	On chartering ships or engaging tonnage for constituents for vessels to proceed to outports for loading	2½	„
16.	On advertising as the Agents for Owners or Commanders of ships for Cabin passengers, on the amount of passage money, whether the same shall pass through the Agents' hands or not ...	2½	„
17.	On procuring freight for a ship by a shipping order or charter, or on procuring employment for a ship on monthly hire, or acting as Agents for Owners, Captains, or Charterers of a vessel, upon the gross amount of freight, brokerage inclusive ...	5	„
18.	On engaging Asiatic Emigrants for a ship to the Mauritius, the West Indies, or elsewhere, upon the gross amount of earnings	5	„
19.	On engaging troops for a ship to Great Britain or elsewhere, on the gross amount of passage money for rank and file	2½	„
20.	On realising inward freight, inward troops, Emigrant, or Cabin passage money	2½	„
21.	On landing and re-shipping goods from any vessel in distress, or on landing and selling by auction damaged goods from any such vessel, and acting as Agent for the Master on behalf of all concerned, on the declared value of all such goods as may be re-shipped, and on the nett proceeds of all such goods as may be publicly sold ...	5	„
	If Opium, Indigo, Raw Silk, or Silk Piece-Goods ...	2½	„
	If Treasure, Precious Stones, or Jewellery ...	1	„

22. On effecting Insurances, whether on lives or property ... . 2½ per cent.
23. On settling Insurance claims, losses, and averages of all classes, and on procuring returns of premium ... ... 2½ „
24. On drawing, purchasing, selling, or negotiating Bills of Exchange ... ... 1 „
25. On debts or other claims when a process at law or arbitration is incurred in claiming them ... 2½ „
Or, if recovered by such means ... ... 5 „
26. On Bills of Exchange returned dishonored ... 1 „
27. On collecting House Rent ... ... 2½ „
28. On ship's Disbursements ... ... 2½ „
29. On realising Bottomry Bonds, or negotiating any loan on *respondentia* .. ... 2½ „
30. On granting Letters of Credit ... ... 1 „
31. On sale or purchase of Government Securities and Bank or other Joint Stock Shares, and on every exchange or transfer not by purchase from one class to another ... .. ½ „
32. On delivering up Government Securities and Bank or other Joint Stock Shares, on the market value. ½ „
33. On all amounts debited and credited within the year (less the balance brought forward) upon which no commission amounting to 5 per cent. has been charged ... ... ½ „

☞ Brokerage when paid is to be separately charged.

H. W. I. WOOD,
Secretary.

Tonnage Schedule and Measurement Rules for the Port of Calcutta.

ARTICLES.	Cwt. per Ton Nett.	Cubic Feet per Ton.
Aloes, in bags and boxes	20	.....
Alum, in ditto	20	.....
Aniseed, in bags	8	.....
Arrowroot, in cases	.....	50
Arsenic, in bags or cases	20	.....
Asafœtida, in bags and boxes	20	.....
Apparel, in boxes	.....	50
Bark, in bags	8	.....
Bees' Wax	20 gross.	
Barilla	20	.....
Betel-nut	20	.....
Books	.....	50
Borax	20	.....
Bran	14	.....
Brimstone	20	.....
Bullion	at per cent.	
Cake-lac, in bags	16	.....
Camphor, in cases	.....	50
Cardamoms, in robins	8	.....
,, boxes	.....	50
Cassia, in boxes	.....	50
,, bags	12	.....
Castor Seed	15	.....
Chillies (dry), in bags	8	.....
China Root, in bags	11	.....
,, boxes	.....	50
Chiretta	.....	50
Churrah	14	.....
Cigars	.....	50
Cloves, in bags	8	.....
,, boxes	.....	50
Coals	20	.....
Cochineal	.....	50
Coffee, in bags	18	.....
,, casks	16	.....
Coral, rough	20	.....
Coir, loose and unscrewed	12	.....
Copras, or Cocoanut Kernel	14	.....
Coriander Seed	12	.....
Cotton	5 bales not exceeding	52
Cowries	20	.....
Cummin Seed	8	.....
,, Black	8	.....
Cutch, in bags	18	.....

ARTICLES.	Cwt. per Ton Nett.	Cubic Feet per Ton.
Dates, wet	20	.....
Dates, dry	16	.....
Dholl	20	.....
Elephants' Teeth, in bulk	20	.....
Furniture	.....	50
Garlic and Onions	12	.....
Ginger	16	.....
Gram	20	.....
Gums, in cases	.....	50
Gunny Bags and Gunny Cloth	.....	50 Not exceeding 2,240 lbs. gross.
Gunjah	.....	50
Hemp	5 bales not exceeding	52
Hides, Buffalo, or Cow, cured	14	.....
Hoofs, Horn Shavings and Tips	20	.....
Horns, Cow, Buffalo, or Deer	20	.....
India Rubber, in bags	16	.....
" cases	.....	50
Indigo	.....	50
Iron	20	.....
Jute	5 bales not exceeding	52
Jute Cuttings	5 bales not exceeding	52
Lac Dye	.....	50
Lard	20 gross.	
Linseed	20	.....
Mace	.....	50
Machinery	20	.....
Metals	20	.....
Mathie Seed	18	.....
Mirabolams	16	.....
Molasses	2 puncheons or 4 hhds	
Mother o'Pearl, in bags	20	.....
" chests	20	.....
Munjeet	....	50
Mustard or Rape Seed	20	.....
Niger Seed	20	.....
Nutmegs, in cases or casks	.....	50
Nux Vomica	16	.....
Oats	16	.....
Oil, in cases	.....	50
" casks	4 hhds.	
Opium	per chest.	
Paddy	16	.....
Palmatine, in bags	16	.....
Peas	20	.....
Pepper, Long	12	.....
" Black	14	.....
Planks and Deals	.....	50

ARTICLES.	Cwt. per Ton Nett.	Cubic Feet per Ton.
Poppy Seed	20	.....
Putchuck	10	.....
Rags	.....	50
Raw Silk, in bales	10	.....
Rattans for dunnage	20	.....
Red Wood, ditto	20	.....
Rhea	5 bales not exceeding 20	52
Rice	20	.....
Rope, in coils	.....	50
„ Lines and Twines, in bundles	16	.....
Rum, in casks	2 puncheons or 4 hhds.	
Safflower	.....	50
Sago, in cases	.....	50
Sal-ammoniac, in bags	20	.....
„ boxes	20 gross.	
Saltpetre	20	.....
Salt	20	.....
Sapan Wood for dunnage	20	.....
Sealing Wax, in cases	.....	50
Seed-lac, in cases	.....	50
„ bags	16	.....
Senna	.....	50
Shells, rough, in bags	20	.....
Shell-lac, in cases	.....	50
„ bags	16	.....
Silk Chussum	.....	50
„ Waste	.....	50
Silk Piece-Goods	.....	50
Skins	14	.....
Soap, country, in cases	.....	50
„ bags	15	.....
„ bar	20	.....
Stick Lac, in cases	.....	50
„ bags	16	.....
Sugar	20	.....
Tallow, in cases or casks	20	.....
Talc	20	.....
Tamarinds, in cases or casks	20	.....
Tapioca	.....	50
Tea	.....	50
Teel Seed	20	.....
Timber, round	.....	40
„ squared	.....	50
Tincal	20	.....
Tobacco, in bales	16	.....
Tortoise Shells, in chests	.....	50
Turmeric	16	.....
Wheat	20	.....
Wool	.....	50

Jute, Jute Cuttings, Hemp, Cotton, Safflower, and other articles similarly packed are screwed in bales varying from 300 *to* 400 *lbs.*

Bengal Chamber of Commerce.

At a Special General Meeting of the Chamber, held on the 4th of October 1883, *the following Resolution was adopted:—*

"*That Rule* 1 *under the Chamber's Tonnage Schedule be altered as follows, in accordance with the Resolutions proposed and adopted by the mercantile community at their meeting on the* 3rd *July* 1883, *and in accordance with the notice issued by the Chamber of Commerce on the* 4th *July* 1883, *under Rule* 23 *of the Chamber*," viz.:—

1.—That where freight is payable by measurement, measurement be by sworn measurers, to be placed under the direction of the Bengal Chamber of Commerce.

2.—That measurement be taken at place of shipment, *i. e.*, exporting wharf, jetty or press-house where adjacent to place of shipment, at measuring Superintendent's discretion, but only whilst the bales are actually being removed in course of shipment.

3.—That such measurement be final.

4.—That in cases of shut-out cargo, or cargo transferred from one vessel to another, original measurements to hold good.

5.—But that any cargo re-landed be re-measured.

6.—That measurement be taken at the largest part of the bale, inside the lashing on the one side, and outside on the other.

7.—That the measurement of jute shipped without measurement shall be entirely at shipper's risk, and that measurement be a matter of special arrangement between the shippers and ship. Further, that all expenses connected with the measurement thereof be payable by the shippers.

8.—That all cotton and other baled cargo arriving at the East Indian Railway Company's terminus at Howrah for shipment direct by boat, be measured by the sworn measurers in the Railway Company's sheds, while being removed in actual course of shipment.

9.—That all baled cargo passed at, or exported from, any of the press-houses to which a sworn measurer may be attached, be treated in the manner as jute, and as provided for in the 2nd resolution.

10.—That gunny bales packed at, or exported from, mills within the limits of the port, be also measured as described in the 2nd resolution.

11.—That gunny bales or other cargo exported by boat direct from outside the limits of the port, be measured by the sworn measurers on the deck of the ship or alongside, but it shall be optional with outside mills and press-houses to make arrangements with the Managing Committee, on such terms as may be mutually agreed on, for the attendance of sworn measurers, at their ordinary shipping wharves for measurement in accordance with Rule 2.

12.—That all baled, cased, or other cargo not provided for in any of the foregoing resolutions, and which at present is measured on this side, under any of the tonnage schedules now in use in the port, or which may require to be measured on this side, by a special arrangement made between shippers and ship, that all such cargo be measured on the Custom House wharf (if for export by boat) or in the jetty sheds (if for shipment through the jetties) by the sworn measurers.

13.—That for the present the sworn measurers to be appointed to carry out this scheme be placed under the direction of a representative Committee to be nominated by the Committee of the Chamber of Commerce.

14.—That the charge for measurement be defrayed by the ship.

15.—That goods in casks or cases be calculated at gross weight when paying freight by weight.

At a Special General Meeting of the Chamber, held on the 29*th November* 1883, *it was resolved—*

That for Gunny Bags and Gunny Cloth the ton shall be 50 cubic feet not exceeding 2,240 lbs. "*gross.*"

That the term "*Dead Weight*" shall be understood to mean the following articles "*only*":—Sugar, Saltpetre, Rice, Wheat, Gram, Dholl, Peas and all Metals.

H. W. I. WOOD,
Secretary.

1*st January* 1884.

Forms of Bill of Lading and Boat Note as adopted at a General Meeting of the Chamber of Commerce, on the 17th January 1880.

Shipped in good order and well-conditioned,

by_____

in and upon the good Ship or Vessel called the_____

whereof is Master for this present Voyage_____

and now lying in the Port of Calcutta and bound for_____

_____

being marked and numbered as in the margin, and to be delivered, in the like good order and well-conditioned, at the aforesaid Port of_____

(The Act of God, the Queen's Enemies, fire, and all and every other dangers and accidents of the Seas, Rivers, and Navigation of whatever nature and kind soever excepted)

unto_____

or to_____Assigns, Freight for the said Goods being payable as customary_____

_____

_____

with Average accustomed. In Witness whereof, the Master or Agents of the said Ship hath affirmed to_____Bills of Lading, all of this tenor and date, one of which being accomplished, the others to stand void.

Dated in CALCUTTA, this_____day of_____18

Weight and Contents unknown.

No.....

Calcutta,.....18.....

To

THE COMMANDING OFFICER OF THE

Ship.....

SIR,

Please receive on board the undernoted Goods from Messrs.....

and grant a clean receipt for the same.

N.B.—This cargo is only shipped on the special understanding that the Chief Officer will sign for all counter or quality marks and numbers, and the Bales or Packages are not to be taken on board except on these terms, and also when a Sirear is in attendance to check the tally.

In case of any dispute, the Shippers request prompt information in writing from one of the Officers of the ship.

Marks and Numbers.	Number of Packages.	Description of Goods.	

No. .....

Calcutta, ... 18 .....

Received on board the ship ..... in good order and condition the undermentioned Goods from Messrs. .....

.....

N.B.—The Chief Officer is requested not to take in any package unless he is prepared to sign for all the qualifying marks and numbers.
All packages in bad order must be returned.

Marks and Numbers.	Number of Packages	Description of Goods.	

Arrived alongside .....

Discharged .....

Returned .....

Remarks .....

(Signature) .....

Chief Officer.

Ship .....

Moorings .....

CONVERSION OF STERLING FREIGHT INTO INDIAN CURRENCY.

The following Resolutions were adopted at a General Meeting of the Chamber, held on the 17th January 1882.

"That the Resolutions adopted, 31st May 1876, respecting "conversion into Indian currency of sterling freight "and commission thereon be hereby rescinded, and "that the following Resolutions be substituted in "their stead, with immediate effect, *viz.* :—

1. "That, in the absence of any stipulation to the "contrary, sterling freight payable in Calcutta, in- "cluding differences of freight adjusted in Calcutta, "and all commissions on sterling freight made pay- "able at Calcutta or there brought into account, "shall be reduced into Indian money at the rate of "exchange for Bank Bills on London on demand "which shall have been current on the mail-day "next preceding the day when the amount to be "dealt with shall be ascertained.

2. "That, in the absence of anything to the contrary ex- "pressed, the words 'current rate of exchange' shall "be held to mean the rate current for Bank Bills on "London payable on demand.

3. "That, for the purpose of charging commission or "adjusting differences, freight expressed in dollars "(American) shall be converted into sterling at a "uniform rate of fifty pence per dollar."

CALCUTTA:
Printed by Thos. S. Smith, City Press, 12 Bentinck Street.

00133022

Digitized with financial assistance from
Government of Maharashtra
on 01 February, 2020